

FUTURE

JULY SCIENCE FICTION

25



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By GORDON E. DICKSON



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FUTURE

JULY SCIENCE FICTION 25¢



GRAVEYARD

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WLEDFE

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10. *Journal of the American Medical Association*, 2000; 283: 2689-2693.

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FUTURE

SCIENCE FICTION

July
1953

Volume
4
Number
2

Robert W. Lowndes

Editor

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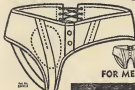
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Figure 1

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THE CHALLENGE

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Down To Earth

A Department of Letters and Comment

FOR SOME time now, there's been a rhubarb going on among science-fictionists, one that has many overtones of a theological dispute. The subject is; what part should "science" play in science-fiction?

For the sake of clarification, let's call the heavy "science" faction the right—since accent on science is associated with the first science-fiction magazine to appear—and the light "science" faction the left, since this can be considered something in the nature of a revolt against tradition. There is also a third faction, running somewhat parallel to the debate, and seemingly a part of the left, but actually outside the field altogether.

Hugo Gernsback can certainly be called the Grand Master of the right; his approach to science-fiction has been, and remains, functional; and the function of science-fiction, in this light, is one of education. This does not necessarily mean pedantry; it does mean that, to be termed "science-fiction", a story must be rooted in scientific facts, and reasonable, logical speculation based upon facts. No matter how fantastic the theories and speculations, we must have the core of fact somewhere, and what is stated as fact must be demonstrably so. A story must present certain facts to the reader (it depends upon the individual reader, of course, whether he will be

[Turn To Page 8]

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told anything he does not already know) then stimulate him by showing what might come of certain types of manipulation, and extension, etc., of them. The key words are *instruction* and *stimulation*.

There is no Grand Master of the left, although John W. Campbell, Jr., has often been considered as such, and, at times, may have fulfilled the role; the approach of the left has been to shift the accent from instruction to what I loosely term "intelligent entertainment", from SCIENCE fiction to science FICTION. The role of instruction in this approach shifts from an ingredient to a by-product; the role of stimulation shifts from scientific possibilities to human possibilities, for the accent is upon characters in a projected environment, rather than the environment itself.

The third faction—which, as I stated above, is really a fraction, a group whose main interest has nothing to do with science-fiction at all—may or may not accept Howard Browne as its spokesman, but Mr. Browne has stated its position clearly enough. It frankly does not give a damn about science, and prefers pseudo-science in the first place—sensational gobbledgook and nonsense that may or may not look like "science" to the uninformed, all depending upon whether the author of the particular story bothered to explain anything, and the edi-

tor didn't decide that explanations were boring and unnecessary.

To give credit where credit is due—and Mr. Gernsback deserves much more credit than many want to give him these days—the right does not object to story value, characterization, or writing-value as such; a memorable piece of fiction which conforms to their scientific standards is always welcome. However, the fruit of this tree has shown beyond dispute that story-value remains secondary; there have been too many indifferent-to-atrocious specimens offered to the public as examples of science-fiction for this aspect to be considered as occasional accident. The fact remains that when one insists upon the instructional ingredient above all else, and one is publishing a magazine—each issue of which must be closed no later than a given date—compromises have to be made. Thus, story-values often have to be slighted, if the fundamental instruction-value is to be maintained. Moreover, experience has shown that the combination of scientific knowledge, in a broad sense, and literary know-how—both from the authorial and editorial end—is a rare bird. Too many writers who knew their science have shown themselves to be style-deaf, and deficient in the ability to present convincing characters; and too many editors, who could

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It was the greatest "top secret" in history, and a blind dog was the key . . .

Our Feature Story

GRAVEYARD

Colson was a dog, but not quite a dog — he was both more and less; and his influence on Jim Marks was the basis for a top secret.

by Gordon R. Dickson

(Illustrated by Paul Orban)



THEY'VE gone and Lord bless them. Anybody who thinks the last part of that statement sounds funny, coming from me, knows what he can do about it, and I'm looking right at you, brother. They were two of the best people I ever knew; and they've gone where I'll probably never see them again; but I've got the puppy to remember them by and that's enough for me.

But I don't suppose you can understand that without knowing their history and how I come into it. My name is Kenneth Parnell; and I worked with Jim Marks on the T and T project where it all started, somewhere in lower Kentucky.

Now, what the T and T project was, I can't tell you; because even now, T and T is top secret and probably will be so for a long time to come. And you don't need to know

that, anyway. All you need to know is that this was a little over three years ago; and that we had a little explosion on the job; and that what exploded was hot—radioactive.

When the smoke cleared after the explosion, it could be seen that the main laboratory and two storehouses were flat. So we sent in a couple of workers in shielded suits to see what could be saved and they poked around for some time; but all they dug out of the rubble was Jim Marks and his pregnant bitch hound, Martha, which had followed him to work that morning.

Jim had been smashed and cut up by lab equipment; but by great good luck, he had been behind shielding, which held. The radioactivity hadn't touched him. But with Martha, it was just the opposite. She didn't have a scratch on her, but there was no protection in the office where Jim had left her to wait for him; a lethal dose of radiation had gone right through her.

She was still feeling pretty good a few days later when they patched Jim up well enough to leave the project clinic—which doubled in brass as a two-bed hospital. I came by and picked Jim up in the station-wagon and drove him over to the pens for research animals, where they were keeping her.

He grinned at me through the tape on his face as he got into the wagon. "Good to see you, Ken," he said. And—"same to you, Jim," I told him; for you see, I was Jim's lab assistant on the project, only I'd just stepped out of the building a few minutes before the explosion, to go over to Supply. Both of us had thought the other was dead; Jim because he thought I was in the building, and I, because I knew Jim was.

"How do you feel?" I asked. "They patch you up all right?"

"Fine," he answered. "Good as new."

So we went over to the pens and Martha was so glad to see him that she almost clawed her way clear through the wire netting that penned her. He said the usual things a man says to a dog when he hasn't seen it for some little time; but finally he ran out of talk and just stood looking at her for a while. At last he gave a sudden little grunt and turned away. And we went out.

THE DAY after that, he wrangled permission to build a pen in his quarters; and took her home.

We were waiting around for reassignment at that time. It would take T and T some time to get set up again; and in the meantime, the abilities of a physicist like Jim—and even of a mechanic like myself—were too valuable to be allowed to sit idle. But the official wheels grind slowly, even at their speediest, so we had a couple of weeks to wait.

I hummed around what was left of the project, dropping in on Jim occa-

sionally. His big, rawboned body had done a good job of recovering from the shock of the accident, but the sewed-up cuts on his face and arms were still pretty nasty to look at. He spent most of his time puttering around Martha's pen, and generally taking care of her. Her teeth had come out by this time and a lot of her hair; but she wasn't in any pain and she seemed happy. Jim thought she had a good chance of lasting until she could drop her litter. He just hoped he wouldn't be ordered to move first.

As it turned out, he wasn't; and I was still there, too. So I dropped over one night when he phoned. I took my time getting there; afterwards I was sorry for it, because Jim thought a lot of Martha. If I'd hurried, I'd have gotten there while she was still alive.

Not that he ever said anything to me about it, though. Jim was the kind of guy who swallowed his hurts. Five of the six pups were dead, too. The other one was alive, but blind. Of course, puppies are always born that way; but there was no doubt that this one would be blind for life. Jim peeled back the tiny lids and there was nothing but scar tissue underneath.

"Too bad," I said awkwardly, looking down at him where he crouched beside the still figures.

"It's all right," he said. "There's still this one." He lifted the blind puppy, cradling him in those two big hands of his.

"You're going to keep him?" I said. I was surprised.

He rose to his feet, still holding the puppy; and looked at me a little oddly. "You don't think I should?" he asked. I shrugged. "You want to know what I think—" I answered—and maybe I was too blunt about it; but that's the way I am and I don't apologize for it. "I think it'd be kinder to put him out of his misery now. He isn't going to enjoy life much—blind."

Jim shook his head. "He'll have a good life."

"And how are you going to guarantee that?" I asked.

"Graveyard," he told me. And he looked at me and grinned.

Now that was just a polite way of telling me to shut up and mind my own business; but maybe I ought to explain. It seems that with the last war, and the things that happened in our business since, the boys at the top have been running out of classifications for stuff that's not to be talked about. There was *Restricted*, and there was *Secret*, and *Top Secret*, and one or two others that sounded, in some ways, pretty silly, so the laboratory boys got to joking about them. And one of the jokes was that they dreamed up a classification of their own to end all secret classifications. It was what a project-member called a project that was so secret that he couldn't reveal it to anybody, even to himself. That was *Graveyard*. It got to be sort of a slang excuse for not giving your reasons for something.

Well, we moved out right after that, Jim to one project and I to another, neither of us knowing just where we were going, or what we were going to do when we got there. And it wasn't until more than three years later that I bumped into him again.

I CAN TALK about this particular project, because they're starting to take the wraps off it. There's already been a lot of buildup information on it planted in magazine and newspaper-articles; and they're just holding back the official announcement out of policy. It was the Space Station Project—Project Moon Puppy, or just plain *Puppy*, as we called it on location, which was at a spot out in the Mohave Desert.

Out there in the middle of nowhere, they had set up a small city for some five hundred of us who were cleared

for top-secret work. We were all kinds—laborers, skilled workmen, technicians, a few specialists high on the list like Jim and others; and—the General.

Now, bear in mind, I have nothing against the General. I hadn't then; and I don't have now. As far as I knew him—which wasn't much, due to our difference in rank—he was a fine guy; he did a fine job of representing Army brass on Project Puppy. But the best man in the world can be a fool where some woman is concerned; and in the case of the General, it was his daughter, Elia.

The pity of it was, she wasn't worth any man's being a fool over. Oh, the body and brains were there. Elia was a tall, slim-featured brunette, with a master's degree in psychology out of Columbia. She was beautiful, she was smart. And by pulling strings unmercifully—through her father and otherwise—she'd gotten herself assigned to *Puppy*. But there was something wrong inside her; there was a part missing.

Jim fell for her—but I'm getting ahead of myself. Let's go back to the day when I first walked into the project and saw Jim again for the first time in three years.

The administration building was a long, two-story building which was still the tallest structure in the project area—outside of certain equipment which we needn't go into. I was standing by a window in one of the upstairs offices, having just arrived, looking out and down at the camp and wondering what they had in mind for me this trip. The door opened and Jim came in.

"Well, I'll be damned!" I said; we shook hands. Neither Jim nor I are very expressive sorts of people. I tried to think of something else to say, couldn't, ended up repeating—"I'll be damned!" and let it go at that.

So we went over to the food-center and had several cups of coffee, and

be explained what I was to do for him. Also, I learned why we were hooked up together again—which is not a common thing in this kind of work. It seems part of the stuff we were doing on T and T was preliminary to part of the work on *Puppy*; so we had been drafted to take up pretty much where we had left off before.

Well, Jim told me what he would be wanting me to do, and I came out with a few questions. We battled it back and forth for a while, then he suggested that we get over to the lab section he held down for our work. So we went.

IT WAS A little box of a prefab, set off in a corner of the project-area. The guard at the door checked my credentials and we went in. Jim led the way, down a short, bare hallway, and in through a heavy door to the lab proper; it was then I got one of the better shocks of my life.

For—as we came through the door—a huge black bound rose from where he'd been lying in a corner; and came threading his way through the cluttered maze of equipment with the assurance and skill of a tightrope walker. This alone would not have been so disturbing, but the dogs' eyes were open; and they were eyes I had seen three years before in a wrinkled puppy-face, gray, scar-tissued, and blind as a bat.

He passed Jim, came up to me, and thrust his nose into my hand. Automatically, I reached out to pat the broad head; and I turned to Jim.

"How the devil—" I began. Jim grinned.

"Surprised?" he said. "Every so often I still am, myself. But he knows this place like a book."

"A lab?" I said. "Where stuff is always being moved around?"

"Uh-huh," agreed Jim, softly. But there was an odd look in his eyes, as if he was watching me narrowly to see how I took his answer.

He turned away from the dog and

we got down to business. But I noticed something disturbing: The gray, blank eyes seemed to be following his motions as he explained things to me.

2



IN THE WEEKS that followed, I got to know the dog well. His name was Calum and he was an awesome creature. His weight was a ninety-four pounds, his height over five and a half feet when he stood upright on his hind legs—which he would do at Jim's command. And he was black as a night in bell. He took to me—strangely, for I never before had cared much for pets. Perhaps it was something Jim said to him, for he would do anything for Jim; and I know he understood.

But the oddest thing about him was that he was not like a dog. By that I mean (if I can just put into words what I have in mind) he didn't act the way you would expect a dog to act—the kind of actions that people refer to when they use the word *doggish*. Calum did not bark at you. He seldom wagged his tail, even to Jim—though it was apparent at a glance how much Calum thought of Jim. Perhaps his size had something to do with it. It forced him to act proud—almost like an individual. He was like a third person in the room as we worked in the lab.

Looking back on it now, I think I could have either liked him or feared him. And that Calum realized it and handled himself so that we ended up friends.

I don't mean by this to give the idea that Calum had a mind like a human being, or any such thing. Smart and wise, he was; but only in the way any dog can be smart and wise. The miracle with him lay someplace else,

outside his intelligence. It was something I can't describe because we have no words for such a thing. But I began to find out about it about a month after I got back to working with Jim.

BUT FIRST—there was Elna.

We had been busy at the lab for several days, just getting the work set up. It was late afternoon, and we were working on opposite sides of the lab, when Calum—who was sitting beside my bench like a huge silent devil—suddenly lifted his head and swung it toward the front of the building, as his ears pricked up. At the same moment, there was a small clatter from the other side of the room, as the soldering-iron Jim was using slipped from his fingers and rattled onto the floor.

I hadn't heard anything. I turned toward Jim.

"What—" I began; and then I heard the footsteps of the door guard coming down the short hall and a knock on the lab door.

"What is it?" called Jim.

"Someone to see you, Mr. Marks," came back the guard's voice.

Jim turned to me, and there was a hint of embarrassment in the way he spoke, "That'll be Elna," he said. "She can't come in here, of course; I'll have to go out. About time we knocked off for the day, anyhow, isn't it?"

I stared at him. Our kind of people—the ones they put to work on projects like *Puppy*—eat, breathe, sleep and play our work. The idea of quitting, just because it was around four o'clock, was like suggesting to a fish that it could come out of the water and dry itself off, now. And what would I do with any spare time—except maybe get a pass into town and a few drinks into me? There was nothing else to do.

Then I got it. "Yeah," I said. "Sure." I laid down what I had been working on, turned off the current,

and the three of us went outside, locking the lab door behind us.

Elna was waiting on the steps of the building for us. It was the first I'd seen of her, although I'd caught mention of the General's daughter at the food-center and at the Recreation-Center my first evening in. She was just as beautiful as they had said she was, with the fine and smoothly-efficient appearance of a well-designed piece of equipment. I remember her eyes were blue—they changed from blue to green depending on how she was feeling—but that day they were blue and cold, as they looked at Calum and at me.

"Ken Parnell," said Jim, introducing me. "They assigned him to me; we were together once before."

"Hello," she said.

I looked at her and I knew that she and I would never get along. But there was something else I had to see, too, whether I liked it or not. When I heard the talk in Rec, I figured that she was all phony—that without the General's pull, she'd be nothing. There's something special about those in our line of work you know. You can feel it when you meet them. They either belong or they don't. Well, Elna may have had to pull wires to get in, but she was in by a bigger right now than pull. She had it—whatever it was—just like Jim had it, and I had it. She was no good for Jim or the General, or me, or anyone else, maybe; but she had as much right to be where we were as we did.

We said a few polite things and then the two of them went off toward Rec. Center, with Calum to be dropped off at Jim's quarters on the way. The big hound was walking on Jim's side, on the side farthest from Elna. It was plain he didn't like the woman, though he kept still about it.

I went into town and got drunk. As I said, there was nothing else to do.

WELL, I HAD my introduction to the situation. Like Calum, I

didn't appreciate it; but, what the hell—I was Jim's handyman, not his departmental superior. It was just one of those things you learn to live with. Elna was in Personnel on the project. It was a job that gave her lots of free time—or seemed to. She knocked on our door frequently, and with success. Jim was nuts about her; nine times out of ten he'd drop what he was doing and go out with her—although usually it was just over to the Rec, or some place inside camp-limits. And, after the first few times, we quit the polite convention of my laying off when he did. I stuck right on the job—there was plenty to do—and Calum stayed with me. It was better than shutting him up in Jim's quarters.

So the work went on, on schedule, but it wasn't good. Get that—it wasn't good. It takes more than body-skills and brain to do these kind of jobs; it takes teamwork. Jim and I had been a team—a good team—before. Now we were no good, because Jim was no good—because Elna had changed him from a man standing alone to something tied to her hand and foot.

And on top of this there was something else wrong. I thought at first, it was just Elna; but then I began to see otherwise. Something was eating at Jim, eating the heart out of him. He lost weight and got jumpy; and Calum, like a mirror-image of Jim's secret soul, lost weight too. He took to pacing the floor of the lab restlessly when he was left alone with me—wearing a track back and forth in regular sentry-go in the little clear space between our two work benches. The distance was less than twelve feet, and blind as he was, he had it down to a system—five great padding steps in one direction, turn and five steps the other way.

I guess my nerves were wearing thin, themselves. Anyway, when Elna made a move to meet me, I met her halfway.

The occasion was a party at the Rec hall, marking the halfway point in the project. There was canned music and food, and a reasonable amount of drink; everyone not on duty—regardless of rank—was invited.

I went. Jim and Elna were there together, of course; but she found an excuse to send him off on some errand or other and she came over to where I was sitting in a corner and sat down opposite me. "Well, Ken," she said. "Enjoying yourself?"

"As much as I ever do at these deals," I answered. We looked at each other and she stopped playing. Her eyes were green that night—deliberately green and warm. "Jim thinks a lot of you," she said. "And I gather you think a lot of him."

"That's right," I said.

"I think a lot of Jim, too," she went on; "and since that makes two of us with the same idea, why do we have to fight about it?"

"Who's fighting?" I asked.

An angry glint came into the green eyes. If her lips had belonged to a man, I would have said he was sneering at me. "Oh, let's not play games," she drawled.

"Again," I said, "who's playing? What you two do is your own business."

"Don't act innocent!" she flared. "You've been picking on Jim about me ever since you got here."

I started to get angry myself, and my hands began to go tense. When I got mad, I feel it there first. I live in my hands; they feed me, dress me, work for me, and if necessary fight for me. I could feel the fingers curling up and going stiff.

"Listen," I said, "I don't like you and that's clear channel. I don't like to see someone like you come between a damn good man and the work he lives by. Jim was one of the best we've got, and could be again, if you'd leave him alone. But, get this! I live my own life and I figure anybody else

over the age of twelve ought to live his, Jim passed the age of twelve fifteen years ago; it's his business and yours, and to hell with you both if necessary!"

She took note of my words and my anger and weighed them like abstract problems. She sat looking at me for a long second and then she spoke... calmly.

"Then what's wrong with him?"

"You," I said bluntly.

She shook her head. "Try again," she said, without rancor. "There's something bothering him that he won't even tell me; and if it isn't you—" She checked herself suddenly, and her eyes got a speculative look in them. I tried to guess what had popped into her head but failed. I wasn't too surprised; the woman had a better mind than I have, and I'm not ashamed to admit it. Besides, she was closer to Jim than I was.

WELL, IF SHE could figure it out, maybe I could find out in more ordinary ways. And if it was something that worried her, too, then it might be serious. There was no law that said I couldn't ask questions.

Jim and I both lived in the same bachelor barracks. I went back there and waited until I heard him come back from the party and the door to his room slam. Then I broke out a bottle from my own foot-locker cellar, took it down the hall and knocked on his door.

"Who's that?" he called.

"Ken," I said.

"Come in," his voice filtered through the thin door.

So I went in. He was sitting on the edge of the bed, smoking. Calum was seated beside him, the big black head in Jim's lap. His face was lean and haggard and his eyes drawn and hungry for sleep.

"I brought you a drink," I said, taking a couple of water-glasses from Jim's stand and running about a triple

shot into each. I took it over and sat down in the chair opposite his bed, putting one of the glasses and the bottle down on the night stand at his elbow. Calum lifted his head and pointed it at me.

"What's this?" he asked, looking from the drink to me.

"I figured you needed one," I said.

He grinned, a little sadly. "Maybe I do—" he said. "But it'll leave me knocked out in the morning, and I've got work to do."

"Might be a good thing if you slept in," I said, lifting my own glass. "Here's with mine." And I poured it down.

After perhaps a second of hesitation, he picked up his and drank it. He shuddered as he set the glass down. "Whoof!" he said. "How you can swallow whisky without blinking, Ken, I don't know."

"The only thing my old man left me," I said, "was a rock head and a cast iron-stomach." I decided to quit beating around the bush; it wasn't my way, anyhow. "What's chewing you, Jim?"

He looked at me and drew a long breath. "So that's it," he said.

"That's it," I told him. He picked up his glass and held it out to me. "Give me another," he said.

I poured it for him. He gulped about half of it, and sat for a moment, nursing the glass between his big hands, and looking at it. In the silence, Calum made an odd little sound like a question; Jim reached out automatically to pat his head. Then, finally, he looked away from the glass in his hand and back to me.

"Al right," he said—and his voice had the sound of a man worn to the breaking point. "Want to hear a story, Ken?"

He slurred the last words a little. What with his tiredness, and the fact that he wasn't ordinarily a drinker, that first large shot had hit him—or

maybe just the idea of it had hit him. I couldn't tell.

"I'm listening," I said. "If you want to talk, and security doesn't mind."

"Security!" He laughed—not happily. "This is too big a story for security, Ken. This graveyard."

My glass twitched a little in my right hand. Did I tell you I felt things first in my hands? They twitched now; and I could feel them going a little cold—a cold that began to seep up my arms toward my spine in a shiver. For *graveyard* is a joke; but Jim wasn't joking.

I remembered what *graveyard* meant—something so big you couldn't even tell yourself what you had; and I sat very still and looked at Jim. Maybe I had a premonition.

He got up, poured himself another drink, then opened a drawer in his writing table and took out two sheets of cardboard and two pencils. One sheet he put on the floor in front of Calum and weighed it down, then put one of the pencils between the big dog's teeth, which gripped it firmly, point down. The other sheet and pencil he handed to me.

He sat down again on the bed and gulped at his drink.

"All right, Ken," he said. "Don't say anything out loud, but draw a letter on this card and hold it up where I can see it."

I stared at him.

"Go ahead," he said. I shrugged and drew the letter "P" on my card; and held it up.

Jim focused his eyes on it and gazed steadily. I sat for a few minutes, holding the card up to his gaze and getting more and more impatient. Finally I spoke. "Look—what is this?"

Jim did not take his eyes from the card. "Look at Calum," he said.

Without moving the card, I glanced sideways and down. The shock was so great that I nearly dropped the card.

Slowly, painfully, with the pencil grasped tightly between his teeth, the great inky hound was drawing a wav-

ering "P" on the weighed-down cardboard six inches from his blind, scar-tissured eyes. As I looked, he finished the ragged loop; and, dropping the pencil, lifted his head to Jim as if waiting to be praised.

I looked at the "P" and I looked at the one the dog had drawn. I looked at Calum; and I looked finally at Jim. His hand caressing the thick black head, he looked back at me and smiled a little sadly.

"So now you know," he said.

3



AND THEN he told me. It seems that, at first, Calum had seemed quite normal—nothing more nor less than the blind puppy he appeared to be. Even during the first couple of years, he did nothing

that could not be explained by the fantastic-enough memory that some blind dogs seem to have for places and objects. Naturally enough, Jim kept him mainly in his quarters, or other areas with which the dog could easily familiarize himself. It was not until a little over half a year ago Jim became aware that Calum took notice of things in an impossible fashion.

Jim didn't quite remember the exact moment when he first realized it. Thinking back, it seemed that he had been noticing little things for a long time without the implication really making itself felt on his conscious mind. At any rate, when Calum one day detoured around a piece of furniture that had been moved, without warning, by a visitor to Jim's quarters, Jim made up his mind to settle the question once and for all. He took Calum out to a tangled section of brush-covered country at the edge of the town where he was at the time and raced him through it, running as fast as the man could run past fallen trees

and bushes and around stupors. Loping easily beside Jim, Calum avoided all obstacles as well as if his vision was perfect.

"Something to do with the radiation that killed his mother, maybe—" said Jim. "God knows."

At any rate, it was a fact. Call it telepathy or what you would, Calum could make use of Jim's eyes. After that race through the country, evidence began to pile up of this. In fact, oddly enough, the rapport between the two seemed to grow.

"And for all I know," said Jim, "it's still growing. Lately..." He paused.

"What about lately—" I asked.

"Lately," Jim finished, slowly, "I think I'm beginning to 'catch some of his sensations. Smells that reach his nose; sounds he hears before I do—" Suddenly I remembered the first time I had been in the lab and Elna had come; both Jim and the hound had reacted to a voice or knock I had not heard.

"Well," I said, finally, when I could get my breath. "It's the biggest thing I ever ran into. But why let it get you down, Jim? Why don't you just notify the Planning Board and get yourself an appropriation to investigate the situation properly?"

His reaction was violent. "Why don't I?" he exploded. "I'll tell you why. Because Calum's a natural for Initial Pilot; and you know it!"

AND THEN I got it. Finally, through my thick skull, a light began to filter.

As I said, we were trying to get a space-station into free fall around the earth. That would give us a nice little firing-platform circling the Earth—a gun pointed at the heads of any would-be aggressors from now until doomsday. If we could do it, war might go out the window for keeps. And we had the problem all but licked—the "all-but" part of it being that the first initial chunk of equipment to be shot up would have to be jockeyed into po-

sition in the orbit around the earth we wanted, by a living pilot.

The only drawback to that was a mass-ratio problem that said that our pilot would have to be someone under a hundred pounds weight; and that we didn't have. Sure, we could have caught ourselves a midget and trained him, but that would have taken two years. And we didn't have two years, according to certain information regarding the international situation—even if we could have found someone who didn't mind a one-way trip. Because the way things looked, our initial pilot wouldn't have any way to get back.

But Calum, with his light-weight animal body, and the trained mind of Jim directing it, would be just dandy. Now I knew why Jim had been going through hell these last few weeks. I looked at him. "Calum mean that much?"

He turned a strained face from his glass up to me. "You don't know what it's like," he said. "It's a little like our being one person. I—" his voice ran out and stopped.

I stood up. "Okay," I said. "You want to know what I say about it?" He looked up at me and nodded.

"I say wait," I told him. "There's time left for the project to find a different answer, without you or Calum. Hold back a while; maybe they'll figure something and he won't be needed."

Jim shook his head. "I wish I could believe they would," he said bitterly.

"They will."

He smiled at me like a lost soul, uncertain of a chance of salvation that was being held out to him. All the strength that had once been in the man had been eaten away as if by acid. I sat down again. I filled up his glass. And I argued.

In the end he agreed to wait.

But two days later, he came into the lab looking kind of shame-faced and told me that the talk with me had helped so much that he had told Elna about the situation; and while she sympathised with him, and gave me a lot of credit for trying to help, she

pointed out gently that his duty was not to delay.

Duty. That was one smart woman. At one stroke she got rid of Calum and got in a backhanded slap at me.

I picked up a wrench and went back to work.

JIM'S OPENING up to the powers—that-be caused a quiet, well-covered, but powerful revolution of the work on the project. While the camp appeared the same, on the surface, a few of us were switched to new jobs within twenty-four hours.

Jim, Calum and I became the nucleus of a fresh unit that concerned itself exclusively with the design and operation of the control-section in which Calum would ride. Meanwhile, the construction of the large, two-stage rocket that was to carry him and the equipment was begun.

As work progressed, the pace accelerated, and Security on this part of the project became lighter. We were restricted, for all practical purposes, to the limits of the camp itself; most of building where our part of the work that was being carried on. I lost weight. Jim got down to the point where he looked like a walking death-mask; and the rest of the crews were strained to the point of exhaustion.

Surprisingly enough, the one who took it best was Calum. He ran through the practice-sessions time and time again, with no appearance of impatience and fatigue. Like the rest, I saw nothing remarkable in this to start out with. I might have finished the project with that same mistaken impression if I hadn't happened to mention to Jim, one evening around ten o'clock when we had knocked off for coffee and sandwiches, that there was one member of the outfit that took things calmly.

Jim looked at me. We were sitting off in a corner by ourselves, but still he lowered his voice when he answered. "He knows," he said.

I stared at him. "He knows?" I repeated. "What're you talking about

Jim. How could a dog know anything about electronics?"

"Not that—" Jim made a little gesture as if he was brushing away a cobweb from in front of his face. "Of course he doesn't know that. But he knows—"

"What?"

"That I think he's going to die," said Jim, hoarsely.

The piece of sandwich I had just bitten off went dry in my mouth. I sat there and Jim got nervously to his feet.

"I can't let it happen," he said desperately. "I can't—" He swung away from me and strode off abruptly into the farther shadows of the big building, walking with the short, jerky strides of a deranged man.

A COUPLE of days after that, Security went up another notch, and I was taken off the job. By that time, most of the heavy work had been done. I went to bed and slept for twenty-four hours. When I woke up, it was the middle of a Wednesday afternoon, on a hot desert day. I dressed and strolled over to the Food Center; and from there to Rec. And there, as I was slumped in an armchair, Elba ran me to Earth.

She came in looking like a full page add in *Vogue* magazine, and sat down opposite me. "How's Jim?" she asked.

"In the pink of health," I said. "Bubbling over with high spirits and good humor."

"Damn you!" she said flatly. "Tell me the truth; I haven't seen him for five weeks."

"All right," I answered. "He's being torn to pieces. He's riding the ragged edge of a nervous breakdown and I think when they shoot the rocket it'll kill him. Congratulations."

Her eyes went blue and hard as sapphires. "If he's lasted to now, he'll live through," she said. "I know what's best for him in the long run."

"I think you're nuts," I told her frankly. "No woman who loves a man would put him through that. I don't

get you at all; why do you want him, anyway?"

"Why?" she retorted. "You wouldn't understand."

"Try me," I told her.

"All right," she said. "And you can tell him if you want to; it won't make any difference. I want him because he's the best available, and I intend to have the best available. Do you understand me?"

"I think so," I said slowly, looking at her.

"As for that dog," she said, her face tight. "He'll get over it. I've got nothing against his liking dogs as long as they stay in the dog-kennel where they belong. I'll pick out his next dog by myself, and there'll be none of this rapport business with it. As for you—you can come around any time. I don't worry about you."

"Thanks," I said, sarcastically.

"Not at all." She was deadly serious.

"He'll need some male friends."

And with that, she left me.

4



THE PROJECT ran to completion in two weeks, being delayed only a few days by some minor change Jim wanted made in the compartment that was to hold Calum. Then they fired it; and

for four hours the whole camp held its breath while it was being maneuvered into its free-fall orbit. Then the news was released that the attempt was a success; and out of the twenty-foot-thick concrete blockhouse they carried Jim on a stretcher.

As I had predicted, he had collapsed.

But good. They didn't even waste time with the camp infirmary. The ambulance kicked its way out the camp gates and disappeared in a cloud of dust for the psychiatric ward of a

hospital in Tucson; they held Jim in there for six weeks.

At the end of that time, I got an order to check with the hospital. I drove down and found that the Department had rigged up special leaves for the two of us. We were to take some months off and act like ordinary citizens. A house had been fixed up for us in Alhambra, California—which is a little suburb of Los Angeles; they'd set up a liberal expense account for us.

It was then that I got one of the better shocks of my life—but I'm getting ahead of myself here. What happened was we took off and settled down to Jim's rest-cure. It was a pleasant life, with nothing to do but loaf and bum around; after three months, Jim was back to his old self again—just as big and slow and rugged as ever—only different now, of course.

And then came the windup. Jim and I had never mentioned Elma since he left the hospital; and I had even gone so far as almost forget her. And then, Lord knows how, she found us.

She must have snooped and pulled some more wires. At any rate, she found out we were in Alhambra; one day, she ran into me at one of those wide open-to-the-air food markets they have out there. I had dropped in to pick up a couple of steaks when I heard my name spoken in a cool, feminine voice; and I turned around to see her there.

"I knew I'd find you," she said.

"I might have known it," I answered.

We stood looking at each other and then she spoke again. "How is he?"

"Fine," I answered.

Her eyes gleamed. "I want to see him," she said. "And you can't keep me away from him."

"Why not?"

"He wants to see me, doesn't he?" She lifted her head sharply. "Don't tell me he doesn't."

"No," I said. "I won't kid you; he does."

"All right, then," she told me. "Take me there."

I turned from the meat-counter and started toward the car, with her beside me. But outside the market, she suddenly caught me by the elbow and stopped me. "Wait," she said. "Give me the address. You go ahead and I'll come in about fifteen minutes."

"All right," and I told her.

She turned and ran toward her own car. It was a large green Cadillac convertible, and it spun out of the parking lot of the store, leaving black strips of rubber on the concrete behind it. I went back to the house and told Jim she was coming. He took the news quietly.

IN FIFTEEN minutes, I heard a car pulling up in front of the house; looking out the hall windows, I saw it was the green convertible. Jim was in the livingroom, reading; he didn't look up. I opened the front door and went quickly down the front walk to meet Elna.

She had changed the sharply-tailored suit that she had been wearing when I met her at the store. She was wearing a light summer dress, now; the simple, smooth lines of it flattered her long figure. She smiled at me—even at me—as she got out of the car. "He's inside?" she asked.

I nodded.

She turned from me, back to the car, and lifted out a small, brown object. For a moment I stared at it, seeing but not believing what I saw. Then it came into focus. "A cocker-spaniel pup!" I said. "Good Lord—"

She whirled on me. "Keep your opinions to yourself!" she snapped. In the fraction of a second all the pleasantness was gone from her. We stood eye-to-eye for a second; I felt myself getting angrier than I can ever remember getting in my life before. "All right," I said. "You asked for it. I will."

She twisted away; and her high heels were tapping up the cement slabs of the front walk. I followed her.

The front door opened under her hand; and she stepped into the cool dimness of the house, me at her heels.

"Jim!" she called.

"Here," his voice answered from the livingroom. I heard him rise to his feet as we stepped into the livingroom together.

"Jim—" she began with his name again—and then the voice died in her throat. And I knew how she was feeling. I had felt the same way when I had stepped into Jim's room at the hospital for the first time; and I could have warned her when she lifted the puppy out of her car outside, but she had gotten me mad, and I hadn't.

For Jim stood facing us—and, tall and black and close beside him, stood Calum.

"So you found me," he said. Then he noticed her eyes, dilated with something very close to fear and fixed on the big dog. His hand went out automatically to rest on Calum's head.

"We saved him, you know," he told her. "At the last moment we made the capsule in which he rode detachable. The last burst of power that put the rocket into orbit kicked him loose, and he fell back into the atmosphere. When he was low enough, he broke out of the capsule and opened the chute we had strapped on him. I was with him all the way to tell him what to do."

Elna stared at him incredulously. The puppy wriggled in her arms, seeing Calum; and for the first time, Jim noticed it.

"What's that?" he asked.

She looked down at the puppy as if she, too was seeing it for the first time. For a second she gazed at it distraughtly, like a person finding themselves holding something they don't know what to do with. Then, nervously, she set it down on the rug. It bounded toward Calum, and the big hound dropped his head to touch noses.

"You brought it for me!" There was a kind of terrible shock in Jim's voice; as if he couldn't believe what

he, himself, had just said. He took a couple of blind steps toward her.

SHE GAVE a little shudder as if shaking herself out of a bad dream; and then she seemed in some way to flow back together again; and once more she was her usual self. She faced him.

"How was I to know Calum had lived?" she said, sharply. "Really, Jim, you might have let me know. All these months with no letter or anything, while the two of you were actually quite safe and happy."

"But you brought me another dog!" said Jim, dazedly. "You couldn't be that blind. Could you?" He was begging her to prove his realization wrong. "You must have known that what was between Calum and me was more than any dog-and-man thing. Didn't you? Couldn't you?"

Elna's face was white. When she wished, she had a tongue like a razor; and now, before she thought, she made the mistake of using it. "Are you still sick, Jim?"

He had started to move toward her again; but those four words stopped him like a wall. For a long moment he stood like a statue, then a heavy sigh came from him and all the strain went out of him.

"Elna—" he said, pityingly. He did come toward her now; and he reached out his hands to take hers; but she backed away from him. "I'm sorry."

"You should be!" she blazed. He shook his head.

"Not for what you think," he said. "I'm sorry for you—and I'm glad, too, for both of us. I was dreading the moment when you'd find me; now I find I shouldn't have."

"What are you talking about?" she snapped at him.

"About you," he went on in the same gentle tone, "I didn't realize it, before, Elna. You're so good in so many ways, but you just won't let yourself see what you don't want to see. You don't love me, and you wouldn't admit to yourself that Calum was anything more to me than a pet

which could be replaced by any other. But that isn't true—"

"Why not?" she cried.

"Because we aren't individuals any longer, he and I," said Jim. "That's why they held me in the psychiatric ward; that's why they've kept me hidden out here these months until the two of us could grow strong enough to go on without work. The psychic shock of the rocket-trip welded us finally. I'm as much him now as he is me. Our minds are one solid; I am as much dog as he is man, now."

He paused and looked at her. As she started to understand she recoiled from him. "I'm sorry," he said again. "I am sorry. But I'm no good for any woman, now; and the thought that you loved the part of me that's talking to you now, and did not love the other part of was almost more than I could bear." He followed her with his eyes sadly, as she backed away from him. "But it doesn't hurt so much now that I realize that you don't really love me, and never did."

"I did—" even though she was going away from him now, pride forced her to insist.

"No," Jim shook his head. "Loving me, you might have put me through the firing of the rocket. But no love on Earth would have brought me that little dog as a sop to soothe the loss of Calum. You would take away my plaything and make it up to me with a piece of candy. Elna, Elna, that's not love."

Her face twisted. She screamed at him—what, I don't remember; then she whirled and was running away, out the front door and down the walk, her heels machine-gunning on the cement. The car door slammed; the motor exploded into life and roared away into the distance.

Jim turned to me. He let out a long sigh. "That's that," he said.

He moved over to the phone and dialed a number. It answered almost immediately; and he spoke into the mouthpiece, simply. "We're ready to go back to work now," he said.

And, as the phone answered him

with directions and orders, I knew that he had just been waiting for this moment. The long months—and probably my acquaintance with him—were over for good now. We would be going different ways from this day forward.

I looked at Jim, where he was busy on the phone. I went out to the kitchen, thinking of the steaks I had been going to buy for dinner when Elma spoke to me. But I had forgotten them. I opened the icebox; there was nothing in it. Well, what the hell, I thought, we might as well eat out the few days that would be left to us now, anyway. I closed the icebox door and went back into the livingroom.

So that's the end of it. Security's

swallowed them up now; and I don't expect to ever see them again. Myself, I'm on a minor project back east and I'll probably go from one to another of those from now on until they retire me. But I've got the spaniel pup that Elma brought that day and left. He isn't Calum and he isn't Jim; but he reminds me of both of them.

What happened was...an accident happened to both of them. They didn't ask for it, and it doesn't make life too easy for them. But they're doing their job, anyhow, the way they're supposed to do it. And they're together.

So I say Lord bless them.

And I mean it.

★

Readin' and Writhin'

ABELARD PRESS sent me a copy of Charles Dye's novel, "Prisoner in the Skull", asking price \$2.50, which they assert "has blended scientific ingenuity with a suspenseful hunt-and-chase thriller." And, for once, I agree with a jacket-blurb—at least, with the part quoted.

It was inevitable, I suppose, what with the science-fiction boom, and the success of the sex-crime thriller—exemplified, I am told, by Mickey Spillane—that someone would see what kind of sales could be made with a novel that puts the general qualities of the latter into a science-fictional background. I accept this as a *fait accompli*, but I cannot comply with it; it's a fundamentally restricted genre, which cannot but devalue both the novel and science-fiction.

Charles Dye has worked well with the straw that the publishers insisted he use; that he has turned out a read-

able, interesting story only bears testimony to basic abilities which were not developed to anything like their potential—such development wasn't wanted. In this type of story, few characters remain alive long enough to make any impression on the reader; but Dye has managed to make a couple of them vivid, nonetheless.

The mystery itself is an interesting one; and the ramifications, while extremely complicated, are handled well enough, so that the story isn't totally incoherent—as is often the case in this sort of thing. And despite the razzle-dazzle, the author actually plays fair with the reader; there's enough given for him to spot the solution well in advance, if he's clever enough.

My verdict, therefore, is: well done, Dye—but please don't do it again!

R. W. L.

My name is Loneliness — but once, I was a man . . .

THE AEROPAUSE

by Charles Dye

(Illustrated by Milton Laroon)



*No sound there was
No planetary change
Nor anywhere a warning to beware
Only a web of waiting in the air—*

THEY TORE down the sky—
They shattered all laughter—
They smashed up the solar system and turned it
into a planetary boneyard uninhabitable for 2,000
years!

And all the king's horses and all the king's men would never be able to put any of it together again. Because they had taken apart my body and lost most of the pieces. But worst of all, love had become a crazy thing, a merry-go-round of perpetual motion inside my head. It was a starving prisoner inside me, for I had no body to express it with, nor did I have Helena to feed it to. And I'm so lonely, forever riding a trail of meteor-dust through the no-man's-land of the aeropause—that vast, empty region where Earth's atmospheric envelope thins out into the cold star-stung empires of space.

I rode for all eternity a great pock-marked sphere, a star-ship, a war-ship, a planetoid-camouflaged ball of death. I am timekeeper and watchman of the solar graveyard, a forever-doomed gravitational captive of the planet that had once spawned my kind. My name is Loneliness.

But it wasn't always so. Once I was a man, a poet and expresser of 21st Century neurosis that nobody wanted to listen to. Then my name was Richard Rogue...

IT WAS SUNRISE over Sunset Beach.

From behind a near horizon of wind-blown pines and honey-brown sand dunes the sun slightly appeared. It reminded me of a giant bloodshot eye trying to catch the awakening world in some unlawful act. A sudden flutter of wings meant that the seagulls had no intentions of getting caught. Their newlings sounded cheerful on the early morning air as they went about their business.

A breeze came riding in with the tide, bringing with it the sea smell of things far-off, unknown. I smiled at the thought that that which lies hidden beyond Old Mother Earth's watery horizons could still create such a sense of wonder in me—in a century of interplanetary colonies, commerce, commercialism, psychological adjusting, military administration, swashbuckling adventure.

I would soon be joining that part of the ebb and flow of humanity, the flotsam and jetsam riding on a torrent of egomania up to the stars, becoming in the process transformed and transfigured into something a little more than just Man.

I was tired of my 21st Century version of an Ivory Tower by the Sea—an old, plastic camping-igloo blown up with CO₂ cartridges. All ivory towers eventually become escape-proof prisons. One's psychological patterns become so integrated with the tower's womblike protection, that the very thought of venturing forth into the outer world recalls the pain and rage of being born, and the accompanying pre-conscious sense of rejection and loneliness.

The tower was becoming a mother to me, a mother that did not want to give birth. So tonight I was rebirthing myself into the torrential flood of humanity which I had withdrawn from so long ago, to record the poetic neurotic history of the times.

I tossed away the cigarette I had been smoking and felt warm hands slip under my arms and around to my bare chest. Helena—my jailer, keeper, mistress. She rested her cheek against my shoulder and slowly ran her fingers over my chest, saying nothing. I continued to stand, unmoving, where I had stood all morning since pre-dawn when I had looked the giant bloodshot sun in the eye. All night long, instead of making love, Helena and I had reasoned, begged, pleaded, argued, threatened, cajoled each other over the course I was about to take.

After a while, she spoke. "Please, Rick... please." Her voice was beginning to have the repetition of a broken tape, which wasn't like her.

I turned around, abruptly, and stared down into her tan, sun-freckled face. Her yellowish-brown eyes had a taunt, dry look about them. She had cried herself out during the early morning hours when I had been out roaming the shadowy dunes, trying not to

let my love for her kill all my free-will.

I took her by the hand and led her down to where the surf was beginning to boom and pound on the rocky strand. We found a patch of sand and lay down. Already, shimmering heat-waves, like miniature breakers, were starting to roll up into the glassy sky. It would be another red day.

Her fingers stroked the nape of my neck. "Oh, darling, I don't want them to pigeon-hole you, put a homing-pigeon on your neck, imbed it in the base of your skull so they'll always know exactly where you are. 'In case anything happens to you,' so *they* say. And what if you unconsciously break any of their laws? The pigeons become stool-pigeons, homing in Civil Security—eventually, even if you're on Venus. See how much free-will you have then. But you can never go to the stars any more than I can."

With one arm I shielded our eyes against the sun. It had picked up a whitish haze from somewhere, which gave it the embryo-coloring of monstrous egg frying against the heavens.

The stars were out. Part of what she said was true—we were both CD's, genetic defectives; we had been sterilized at birth. There weren't many of our kind left—only a handful scattered over the rest of the world. We were allowed by the World State to do pretty much as we pleased—and in one sense of speaking, we had more freedom than our genetically-superior brothers; it was arbitrarily up to us whether or not we wanted to be pigeon-holed. It wasn't to the others, on whom pigeons were planted at birth—making them lifetime World Citizens, for to remove a pigeon was instantaneous death.

No... stars or not, I'd made up my mind I wanted to become a World Citizen and wear a homing-pigeon—advantages or disadvantages—and feel the great uneasy shifting, experimenting, always dreaming, always hoping mass-consciousness of humanity.

THE LATE afternoon sun was now a hob of yellow ink against the

blue blotting-paper of the sky. In a fitful sort of restlessness we had slept away most of the day. Out of the corner of one eye I glanced at Helena. She was lying, eyes half-closed, in the crook of my arm. I looked down the tawny curves of her body, completely tan from head to foot. Swim-suits were unnecessary in such never-never lands as Sunset Beach; neither of us had worn one for years.

But her body in all its tawny, supple, sensuousness left me feeling stale, and I'm sure my own masculinity left her with the same feeling. That's why we had argued instead of making love last night; we were at a stalemate. Each wanted the other to stay; neither wanted to go with the other. She suddenly didn't seem real, three-dimensional, but more like a cardboard silhouette, a cut-out paper doll. And I knew I must appear the same to her.

Yet we loved each other just as fiercely as before.

With the approach of evening, fog-vapors were beginning to crawl in over the white-capped waters of the roiling Pacific. I got up to get dressed, get my things, go. She got up, too, facing me, her back to the dying sun. For an endless moment we stood looking into each other's eyes. Then a single tear splashed down her cheek.

I didn't kiss it away.

She turned and ran up the strand, vanishing into the foggy land-haze.

The sun rested an instant on the Pacific horizon, looking like a murky blood clot. And then—

It was sunset on Sunset Beach.

EARLY THE next morning, in Los Angeles, I hopped the fastest moving-sidewalk down to Central Indexing, where the old city hall skyscraper used to be. As I jumped off, over to the entrance-ramp, two men appeared from nowhere and stopped me. They were wearing the regulation tunic and shorts of Civil Security. Holding up their right hands, they let

me see the super-sonic weapons there pointing at me.

In a clipped voice one said, "Hop back on the sidewalk; we'll explain later."

My first brush with Security—and I didn't like it. Further down the street, I was commanded to jump over to a parking-ramp where a helicopter was idling at the hands of a third Security man.

Once in the air, I asked, "Have I done something wrong already? I was on my way to be indexed and pigeonholed."

"No, nothing wrong," one of them said. "For reasons of security, we couldn't explain matters to you down there. The thing we wanted to explain was that we have to take you some place else for the actual explanation."

An hour later, we landed somewhere in the Mohave Desert behind the Sierra Nevada mountains. A luxurious desert cabana was the only structure in sight. We walked through the dry, eye-parching heat over to the cabana. Inside, the air-conditioning bit me like an icy polar blast. The usual low-slung airfoam furniture decorated the place, but in excellent taste.

A man in a white house-tunic appeared and said, "Pyronn is waiting for you."

I started. Pyronn was chief of Civil Security—a man who, for some reason, had dropped out of public life years ago. A moment later, as we stepped through a short corridor and into another room, I saw the reason why. The shock of the sight made me sick.

Pyronn had undergone a complete visceral extrusion—and was still alive! All his organs, his vitals, lay all around him in an array of domed metal and plastic trays, shelved and

His voice, when it came, sounded hollow and full of echoes. "Yes, Richard Rogee, at first it is a chilling sight."

I only nodded—not daring to trust my voice.

"It was done to facilitate easy ac-

cess to any future worn-out or diseased organs. I expect to live many years. Many, many years."

There was another polite pause, in which I could think of nothing to say.

WITH A RATTLE, Pyronn cleared his throat. "I am going to talk to you a little while, make you a speech. The question and answer period will come after I'm finished."

"You have been out of touch with the main stream of human events for quite a while, and it is very pleasant that you at last want to join World Citizenry. However, you can be of more use to World Citizenry by not joining it; that is why you were stopped from being indexed."

"Momentous things have been brewing for a long time, and now they are about to explode. To be very brief: Civil Security and Central Indexing are in a struggle for policy-making control. We think we are right; they think they are right. The major issue at stake, to put it simply, is whether or not Indexing should carry pigeonholing to the stars. We think it should; they think it shouldn't. No matter; forces have already been secretly set in motion by both factions—forces which are now too late to stop. There will be a clash and violence."

"For some time, in anticipation of just such an event, we have had hidden out in the asteroid belt an planet-camouflaged warship, completely outfitted with the latest in atomic warheads. All Index has is the Moon and some inferior ships. I say inferior, because their ships will lack the things ours will have: A cybernetic computer-system with the subconscious portions of two human brains wired into it as living, inexhaustible memory-tanks."

Pyronn paused a moment for dramatic emphasis, and I began to have an uneasy premonition about what was to come.

"A few days ago, the problem of where to obtain suitable brains came up. Pigeon-holed individuals were out, automatically; the pigeon would have

to be removed, and that means death. So—almost all of humanity was out. That left what there was of your kind to choose from. Of the sixty-five GD's remaining, we decided on you for one of the brains.

"Now—you will want to know what remuneration there is in it for you. You will be a very large kingpin in helping what we think is a righteous cause. When your brain is wired into the computer, your scope of awareness will expand to unbelievable dimensions. Moreover, you will be out in the stars—something that would never happen, otherwise. Your body and all its vital organs—thanks to the advances in visceral extrusion techniques—will be safely put away in a vault, awaiting the return of your brain and nervous-system. You will feel no pain except brief psychological discomfort during the actual extrusion operations. Most overwhelming of all, you will have had a sensory preception adventure unparalleled in all of man's experience."

Pyronn paused again. Then: "It is now question and answer time."

The shock of everything Pyronn had said had so hardened me that I no longer looked with revulsion upon his own grotesque being. Nevertheless I was surprised at the steadiness of my voice as I asked my first question. "Shouldn't I investigate all the issues at stake impartially, until I've decided for myself which group has the more just cause?"

Pyronn rattled his throat before speaking. "You have been out of touch with current affairs, and the history of the things causing these affairs, too long to make such a choice. It would take you months to absorb enough background-material to understand thoroughly on what grounds such a decision should be made. There isn't time; you will have to take a chance on what I say."

"And if I refuse?"

"I cannot force you. You must make the decision of your own free-will. If the extrusion of your brain and nervous system were performed against

your will, the nerve fibres leading into the cerebral cortex would be in such a state of agitation they would wither and die before the hook-up could be made into the computer circuits."

"What's to prevent the other side from grabbing up some brains and doing the same thing you're doing?"

"We have the only two GD brains that could possibly be used for such a purpose."

"You don't have mine—yet."

"Oh, I almost forgot to mention it—that second brain I spoke of; it belongs to the one you call Helena. She agreed last night, and also told us where we could find you."

After the unexpected shock of that, what could I say?

EXPLOSION *after explosion!*

A heavy chain of screaming explosions, crescendoing up the scale of sound into the supersonic limbo-land of inaudibility—of ear-shattering silences. Yet, in my mind's ear they went right on exploding and screaming as before—around and around through all the complex, twisted, torturous convolutions of my brain. And my arms, legs, eyes, ears, inner organs—a thousand pieces of me exploded and went flying off into farthest space, never to be seen again.

Simultaneously tropical torrents of sticky rain beat and splattered over the remaining isolated spark of my consciousness, trying to extinguish it, running and dripping over my brain like bloody worms—

My blood!

A snarling cyclonic spray of it was suddenly whirled down some mysterious vortex and sucked out into the vacuum of nothingness. I was no longer human—only a human nervous-system attached to a brain. I was like a jellyfish, my nerve-fibres dangling down from my cerebral cortex like poisonous, stinging tendrils.

My nerve-fibres were pulled and stretched like rubber bands until they reached a breaking point. My brain let out a silent scream, and my nerves

were abruptly released. The recoil of the snap-back almost blew my brain apart with pain!

A numbness, full of pins and needles and ringing bells, slowly crawled over and clouded my awareness. . . . All pain was miraculously swept away and my consciousness gradually regained its equilibrium with a gentle restless rocking, as if in depths of endless liquid warmth.

Tiny AC electrical impulses began to feed themselves into my nerve-fibres and up through my cerebral cortex. The impulses were suddenly increased and switched from AC to direct current, boosting and integrating and transforming the energy-flow of my highest centers of intelligence into a bursting flood of clarity and power!

I had total awareness of the immediate physical universe surrounding the pock-marked sphere, the masquerading warship—my new home, my new body.

Away from the ship, away from the Asteroid-Belt, was the great tangible blackness of space itself, sweeping away. . . . After a long time had passed, I slowly contracted my awareness into the ship itself, into its exact inner diameter.

I was everything!

I was a battery of radar scopes—

I was all electronic communication-gear—

I was all 360° periscopic view ports—

I was all TV intercoms—

I was the ship and the ship was I!

But where was Helena?

As quick as I thought the question, I found the answer. Her plastic brain-case was on a lower level of the ship, near the giant star-map navigational computers. For an hour I tried contacting her brain-pulse, without success. And she must have tried contacting mine. Why had they wired us in so that we could not communicate with each other?

There was a sudden throb and dull boom. I didn't have to listen to orders given over intercoms to know that the huge atomic converters had been cy-

clotoned into action, that the gigantic warship *Planetoid* was under way, moving slowly out of the meteorite reef-cluster in which it had been masquerading all these months. Pyronn, in all his display of viscera, was on board, sitting in his tank-chair on what tradition insisted on still calling the bridge.

Beside the bridge-level, there were four other levels housing all the complex paraphernalia necessary in operating and maintaining a miniature world, such as the *Planetoid*. One quarter-section of the entire sphere was given over to the housing of thousands of guided missiles, atomic warheads, and radiation-dust bombs. All the men who worked in this five-storied section—missile plotters, controllers, loaders, servicemen, firers—worked in the absolute vacuum of space. For the loss of air, every time the huge missile-door opened or closed, would have been equivalent to one-quarter of the entire ship's supply.

We were out of the Asteroid-Belt now, and balling along through space toward the dark side of the Moon. Not a ship-day passed but that I didn't try establishing contact with Helena, and not a ship-day passed but that I failed. What the data the plotters were storing in my subconscious was, I had no idea; I had no conscious access to that part of my brain. The storage was painless, anyway.

Out of many hours of boredom I accidentally stumbled upon a trick that gave me the feeling of being a god. By telescoping-in, and focusing my awareness into a tight ball within my own brain-case, and concentrating hard on something I wanted done—presto! The moment I released my awareness it would be done, the awareness leaving my nervous system and entering into that of the ship's.

Once I dimmed all the sodium-vapor lamps. Another time, just for an instant, I turned off all the gravity-plates under the mess section. Some hours of futile investigation later, I

heard one of the officers say, "I wonder if one of those brains could be up to some kind of mischief?"

After that, I didn't try any more tricks. I was frightened of some form of tricky reprisal.

ONE SHIP day later, we successfully slipped into the aeropause above Earth, undetected. The converters were shut down and we orbited around Earth, a temporary captive of her gravitational pull. This—the aeropause, I realized—was going to be the field of battle. Pyrona had not released any of his plans, tactical or otherwise, over any of the intercoms; so I had no idea of how the next several hours were supposed to shape up.

The giant guided-missile computers were turned on, and I felt a strange tickling in my brain as I was cross-keyed into them. I was also going to be their memory tanks, where data could be instantly stored, and instantly unstored. Next, the highly-complex radiation defense-screens were tested and a whitish haze of solar electricity bathed the *Planetoid*. Power needed for this was extreme, and came from solar radiation conversion-screens under the mock camouflaging outside the ship. I was beginning to know my new body as well as I knew my old.

Then suddenly... the show was on.

The huge missile-door was balanced open; orders were barked over the intercoms it seemed by everybody from Pyrona on down; the whitish haze of the defense-screens went up. Then, after a moment of last-minute checking, they were off—eight silver javelins of death. Straight for the pock-marked face of the Moon, they raced—

And it was all over in a minute. The Moonport Galileo was a smashed tangle of misshapen wreckage. Of New Mt. Palomar, there was not even a trace. Where the lucite tower of Central Indexing had stood, no one could exactly tell anymore; the hole blown into the lunar plain was that big! As

soon as three unneeded missiles of the original eight came homing back, gliding into their second-level catapult-racks, the massive quarter section door swung shut.

While everybody was congratulating everybody else on a job well done, and wondering where the opposition had been, without warning, there was a tremendous concussion. All the lights went out. Simultaneously, my brain received a shattering shock of electricity which stupified me almost into insensibility. Suddenly I was in rapport with Helena. The concussion had short-circuited us together. We momentarily forgot about the shipboard crisis in the joyous exchange of awarenesses.

Ok, Rick, why did you do it? But I'm glad you did. When they came back the next morning, and said that you had decided against Indexing in favor of lending your brain to Civil-Security, I changed my mind and jumped at the chance for our two brains to be together out among the stars—

Instantly she saw what was in my mind; that we had been tricked into this thing—each thinking the other had had it done first. No wonder they had deprived us of any awareness-exchange—

A sudden AC jolt de-short-circuited us, and tore our consciousness apart. The lights came back on, and pandemonium reigned throughout the ship. All battle station intercoms seemed to be going at once, trying to consolidate data on what had happened.

My mind returned to Helena and myself. What naive, fools we'd been. And just what sort of honorable, law-enforcing institution was Civil Security turning out to be? And its chief, Pyrona... Well, perhaps in this case, Pyrona felt the means justified the end. And maybe they would; we would have to wait and see.

AT THE MOMENT, a monkey-wrench had been thrown into Pyrona's calculations—a rather terrify-

ing monkey-wrench. The concussion had been a hydrogen warhead exploding off the defense-screens. The monkey-wrench was that it had come from Earth, and not the Moon nor any Inner ships.

Then a spacogram was flashing on central intercom. The whole ship picked it up, and we knew the worst. The main body of the chillingly-informal text read:

WE HAVE BEATEN YOU TO THE PUNCH WHILE YOU WERE FOOLING AWAY YOUR TIME ON YOUR LITTLE SURPRISE OUT IN THE ASTEROID BELT. FROM THE MOON WE BLASTED THE WORLD COUNCIL OF NINE RIGHT OFF THE FACE OF THE MAP. NOW WE OF INDEXING ARE THE WORLD COUNCIL. AND WE HAVE CONTROL OF THE GIANT NORBERT WEIRNER MEMORIAL COMPUTER. IT WAS RESPONSIBLE FOR THAT EXPLOSIVE GREETING YOU JUST RECEIVED. LET'S SEE YOUR TWO BRAIN POWERED COMPUTERS PERFORM AS WELL. NO YOU WILL HAVE TO LEAVE THE SOLAR SYSTEM. YOU CAN NEVER SET FOOT ON EARTH AGAIN. YOU DROP BELOW THE AEROPAUSE AND THE COMPUTER BLOWS YOU INTO ATOMS. AND WITH THIS THOUGHT WE LEAVE YOU FOR ALL TIME: THERE IS NO PLACE IN THE SOLAR SYSTEM YOU CAN GO, WITH THE COMPUTER WE HAVE RADIATION DUSTED EVERY HABITABLE PLANET FOR 2,000 YEARS.

The screen went blank. No one moved. I don't have to describe the sickness I and everyone felt; there had to be some way of getting back

to Earth! Everybody was thinking that thought.

There was a sudden horrible rattle of laughter, and Pyronn, looking like a delicatessen showcase-display, filled the intercom screens.

"So — in — that — case — we will — be leaving for — Proxima Centauri soon. I had you all psychologically picked for just this sort of emergency. And you have no emotional ties with other humans on Earth. Fine! Fax! Moxell! Prepare a thousand dust-bombs to go within the quarter hour. Yes...before leaving, we will send them... a little radiation-greeting!"

Pyronn sounded mad. Those dust-bombs; they were too small for any computer to detect; it would mean the murder of Earth. My awareness was a torment of confusion and fear. The solar-system murdered; and now Earth— And we must depart for an alien star, *Proxima Centauri* to leave our bodies behind? Never to see, to feel, to know, and to make love with our bodies again?

AN ABRUPT double-concussion told me the Weirner computer was again in operation. The light went out and I was again short-circuited— not this time not into Helena; instead, into the powerful solar-radiation converters. Half of the defense-screen energy was being bled off through me, and short-circuited around the inner hull.

If I could just concentrate my awareness long enough on holding the short-circuits—

Bom!

I'd done it. The weakened screens had allowed concussion to crack open a seam in the outer and inner shells. In a thousandth of a second the ship's air was gone, and soon everyone was dead. Pyronn was deadest of all, his viscera scattered all over the bridge.

There remained only the quarter-section with its spacesuited murderers and golden showers of deadly dust. There wasn't time to wait for another H bomb that was sure to crack the

hull into smithereens; I decided to try and electrocute them.

With all the concentrative powers of my magnified awareness, I slowly brought the running-wild electrical down toward the 2nd level launching-platform, leaving an exploding, burning, mass of wrecked electrical equipment in its wake.

Just one more level—

Suddenly my brain felt as if someone had stabbed it. I felt Helena send forth an agonized scream of awareness—*Rich! My brain case! Something exploded and fell on it! It's fractured! My...awareness—of—you—is—fading...love...*

Helena!

I had unwittingly killed her. And I had signed Earth's death-warrant, too. At the sound of her scream, all my awareness was instantly centered upon her. The short-circuited electrical energy had never reached the 2nd level, but instead, had gone back to running around the inner hull.

And the dust had been dropped.

My short-circuit to the solar-converters had been wrenched loose when I let the defense-screen energy go back to the hull, and, with the short-circuit broken, eventually out again into the screens.

Now, no H bomb would ever get through. As long as there was a sun the screens would remain impenetrable—there was no one left alive inside the ship to turn them off. Hours had gone by, and the men in the quarter section had died of oxygen-starvation. The huge central auxiliary tank, from which they filled their bottles, had sprung a leak, simultaneously with the bursting of the hull-seam.

For awhile, H bombs continued to explode and glance off the force field. Later, inspection ships came scooting into the aeropause, nosing around the force-field like minnows nibbling at bait. Then, even that stopped.

Several days later, a dozen or so starships left for I know not where—Alpha Centauri, I suppose—leaving

the rest of humanity in its already-dug grave.

The long night of loneliness had begun for me.

MUCH TIME has passed—a millennium, perhaps. I have learned nothing; I have grown no wiser, nothing has changed. The status quo seems fixed for all eternity. Cosmic and solar radiation continue to run the feedback converters that transmit the rays into the magnetic and electronic energies that I and the ship need. There is no way of stopping them or the ship, or myself. There is no way to commit suicide—any more than there is a way to turn off all the stars and cosmic-radiations in the universe.

There are periods when my mind seems to blank out, allowing a little bit of the emptiness of space to creep in. My awareness becomes a burning-glass, focusing and magnifying the stars, trying to trap them all into the net of my loneliness—

Then, from somewhere, the memory of Helena's laughter runs through my mind like quicksilver fogging the burning glass—My awareness wavers and clouds until the web-work of stars melts and runs down the endless face of night like great streaming tears.

Sometimes I have the feeling that I'm on the edge of something big, something great, some tremendous secret hidden from all sentient consciousness since the dawn on the universe. It is at times like this that the vacuum of space—instead of being dimensional—seems to possess no dimensions and unlimited dimensions—all simultaneously. I have the uncanny feeling that if I stare long enough, my vision—like a beam of light—will travel clear around the universe!

But the illusion is always shattered as my awareness glimpses Earth—part of the planetary boneyard I am doomed forever to patrol. Colors inside the convolutions of my cerebral cortex glow crimson with rage and despair when I think of the part I

and fate played in the murder of the solar-system. The whole of creation seems to be burning up with cosmic fire!

But I know it is only the small isolated spark of my consciousness, trapped forever, that wishes it could escape and burn down the universe for what the universe and fate has done to me.

These are my sick moments. These are the moments in which I forget I was once a man.

NO ONE has visited this planetary graveyard. Why should they? And I don't think they ever will. No one has contacted me except the giant radio-stars, if you could call it that. But they have been doing that, off and on, ever since I was integrated into the great cybernetic neural impulses of the ship. Meaningless interferences... beeps and snarls and gurgles; little whines; loud sighs; underwater fishy sounds. Once in the depths of boredom, supremely concentrating, I threw out all my neural waves in a pattern of sound similar to theirs. Almost immediately I got back an exact duplicate of what I'd thrown out. Then, for awhile, we played games of mimicing each other. But nothing ever came of it; no intelligent rapport was ever established.

The stars seemed to operate on a higher energy-level, not seeming completely able to enter into my level; no, I, for any length of time, into

theirs. Once, though, I was carried higher than ever before and heard a strange universe of color sounds which almost shattered my mind. It was the energy-world of the Imagination. The sounds were recording everything in my memory-tank. It was like millions of file-clerks slamming filing-drawers inside my memory tank. The noise and color was so deafening that it knocked me back down into my own level.

I am again going to try and climb into that higher energy-level of maddening color-sounds and impossible dimensions. If somehow, with non-existent fingernails, I can hang onto the edge of my sanity long enough to allow the file-clerks to take this lonely story out of my memory-tank, and then allow me to drop back to my own energy-level—still sane—a small portion of peace will have arrived. For someday, somewhere, in time past, present, or future, someone's imagination may pick up the story from the files of the color-sound world of Imagination and recreate it. First telling it to himself, then perhaps—if he is a story-teller—to others. It is in this hope that I'll survive the millenniums of loneliness to come.

And in all that star-strung dark above this empty blue-black ocean of the aeropause, there is none more lonely than I. For I was once a man.

How deep the night!

★

It is a terrible thing, when the being who has exalted you returns and tells you that you have accomplished little . . .

don't miss

LIFEWORX

by Robert Abernathy
in the May issue of

SCIENCE FICTION



QUARTERLY

STRIKE

A "Dateline Mars" Story

by Richard Wilson

(illustrated by C. A. Murphy)



HERBERT GRAY, the president of the Interplanetary Spacemen's Union, said, "It's a slander on labor, and you can quote me."

Art Roper of Galactic News Service had asked Gray to comment on the sabotage-angle, in the case of a cargo-liner which had been en route from Earth to Mars. The ship blew up as it was coming in for a landing, and all eight persons aboard had been killed. Fragments rained down on the outskirts of Iopa, killing a Martian and an Earth-child. In his question, Roper had quoted the remark of a spokesman for World Government Investigation that W. G. I. was looking into the possibility of sabotage.

The strike had been on for a month; spacemen had walked out in a demand for higher pay and better retirement benefits. The spacemen's union included not only pilots but crewmen, mechanics and maintenance workers at the spaceports.

"It's a libel to suggest that any member of the I. S. U. could have been in any way connected with the unfortunate explosion aboard the cargo-rocket," the union leader continued. "Our activities since the strike began have consisted of peaceful picketing and full cooperation with World Government mediators. The fault, if any, lies with Interstellar Carriers, and its refusal to discuss our just demands."

One by one the cargo-liners blew up, most conveniently for I. C. in its squabble with the union. In fact, these accidents were too convenient . . .

A reporter for Interplanetary News asked Gray whether the explosion could have occurred if a union crew had been aboard the cargo-liner.

"As to that," the union official said, "I can only point to the high safety-record of interplanetary travel, up to the beginning of the strike. You may recall my statement of three weeks ago—that space-travel requires the services of experienced men at every step of the journey, and that the employment of scabs—or so-called supervisory personnel—might detract not only from the quality of the service, but from its safety as well. However, to interpret that as a threat of any kind would be erroneous in the extreme."

"Thank you, Mr. Gray," Roper said. He and the other reporters dashed out of the news conference in the union leader's suite at the Hotel Mars, scanning their notes as they raced to the press room to call in their stories.

The strike had been one hundred percent effective for the first week. Many persons realized for the first time how dependent Mars was on Earth—not only for basic foods, but for little luxuries which had been taken for granted. Coffee, for instance.

Art Roper got meat with his meal at the restaurant, because he was a regular lunchroom customer—others were being turned down. But there was no Earth coffee left for anyone.

"Coffee substitute?" asked the waitress. "It costs twice as much, and it's not half as good; but at least it's the right color."

"I'll try it," Roper said, but when it came he wished he hadn't. It was bad—just as were most of the things that came out of Mars Hydroponics, Inc.

It was at this stage of the strike that it looked as if Interstellar Carriers might have to bow to the union demands. I. C. had taken the stand that it was a public utility, and that the

strike was illegal. It wasn't, but the corporation was holding out in the hope that it would be declared so. I. C. declined to recognize the spacemen's union as a bargaining-agent for its employees, and was working hard in the cloakrooms of the Martian Parliament to push through anti-union legislation. But Parliament moved slowly, even when its members were unanimously in favor of a bill—and they were by no means prepared to back up I. C. in the current dispute.

Then I. C. announced, with as much fanfare as it could muster, that a cargo rocket loaded with tons of supplies had landed from Earth—manned by supervisory personnel. Others followed, although passenger-service was not resumed. The supplies brought by the cargo-vessels took some of the pinch out of the situation, but not much. Prices soared, and the citizens got sore. They weren't sure whether they were mad at the union, or at the carrier; each of the parties in the dispute did its best to shunt the blame to the other.

THEN ANOTHER cargo-ship had an accident. It blasted away from the spaceport outside Iopa, and seemed to hang in the air for a moment. It slipped out of the perpendicular, wavered, and fell back to crash in the desert a few miles away from the city. There was only one survivor in the crew of eight, and he died in the hospital without regaining consciousness.

Interstellar Carriers issued an ominous statement that this—the second crash in fourteen flights—was more than mere coincidence. It bypassed the Martian government, and demanded a World Government injunction to halt the strike on the grounds that it was menacing public health and welfare. I. C. asked that the strikers be ordered back to work, pending a full investigation of the possibility of sabotage. The I. C. demand was issued over the signature of Sargia, one of the Martians on the two-planet board of directors of the firm.

Scott Warren, the chief of the Iopa bureau of Galactic News Service, was reading copy on a wrap-up of the strike story by Art Roper before it went to the operator for transmission to Galactic News headquarters in New York.

Iopa, Mars—(GN)—The economy of Mars is at a virtual standstill today, as the strike of 7,000 Interplanetary Spacemen goes into its second month. An estimated 100,000 other workers on the red planet have been idled by the side effects of the walkout. Vital shipments of steel, chemicals, and other products have been halted; and every day sees more factories closing down. Hospital authorities say medical supplies are dwindling; passenger-service has been suspended completely. The only items moving across space from Earth are foodstuffs, brought in aboard cargo-vessels manned by supervisory personnel of Interstellar Carriers, I.C., denied again today that it is employing scab labor, as charged by the union.

The shipments of food, however, are a mere trickle compared to Mars' usual needs. Food-supplies have fallen to what one wholesaler described as a critically low level, and prices are soaring. Black markets in half a hundred commodities are flourishing despite the efforts of authorities to stamp them out.

Yesterday's explosion of a third cargo-ship brought a renewed demand today for World Government action to end the strike. Sargin, a member of the directors' board of Interstellar Carriers, hurled a new accusation at the union—clearly implying that the union knows more than it is telling about the blasts, which have taken a total of 26 lives. There have been no survivors in

any of the explosions who might have given W.G. investigators an insight into their cause..."

Scott Warren made two minor corrections in the story and handed it to the operator. He looked up then to see the man who had written it waiting impatiently to speak to him.

"What is it, Art?"

"I'd like a special assignment, Scott."

"You've got one," the bureau chief said. "Labor news is hotter than it's ever been with this strike on."

"I know," Art said, "but I want a still hotter story, and I think I can get you one. Atkins has been understudying my beat long enough to take it over anytime, so I wouldn't be missed there."

"What's your idea?" asked Scott. "It'd have to be a good one to pull you off at this stage of things."

"Well, there's my crying need for a real cup of coffee," Art Roper said. "But—seriously—listen to this."

Ten minutes later Scott went with Art to the dead files, and took out a dusty folder. He thumbed through the brittle pages of old stories.

"I see what you mean," said Scott after a while. "But what do you think you can do about it?"

"I want to go to Earth as a passenger, aboard one of the cargo-ships."

"They wouldn't take you," Scott told the reporter.

"They would in an emergency; they've done it a couple of times. We could fake up a message here about my father dying back in Montreal, or something."

"It's worth a try," the bureau chief said. "But watch yourself. We don't want any heroics—just information."

"What do you think I am?" Art Roper asked. "A greenhorn? When it comes to a choice between a good story and my skin, I'll take my skin every time."

SARGIN RADIATED good will. He was a kindly-looking old

Martian. The coarse black hair he'd once had was softened now to a lustrous white, and his smile was as broad as his face.

He walked unannounced into the Iopa bureau of Galactic News and said: "Mr Warren?"

Scott got up and walked around his desk to greet the visitor. Sargin extended a hand. "How do you do," he said. "My name is Sargin; I am delighted to meet you. Your journalistic endeavors often have come to my attention, and I am proud for our city that such a newsgathering organization as yours is quartered here."

Scott shook the hand and said something in reply. Sargin beamed.

"Yes," said the Martian, "as you say. The city of Iopa belongs to all of us; and so I thought you might be interested in having one of your representatives—yourself, preferably, Mr. Warren—attend a little function tomorrow. It will be a ceremony to lay the cornerstone of the Iopa Municipal Theater, to which I have had the honor to contribute, and wherein—it is my cherished desire—many artistic performances contributing to the culture of our city will take place upon its completion."

"Thank you," said Scott; "I should be delighted."

"Excellent," murmured Sargin. He handed Scott an envelope. "This will admit you to the official platform; I shall be looking forward to your visit."

"I'll be there," said Scott.

The Martian bowed, shook hands again and left.

"What the hell was that all about?" asked a rewrite man.

"Public relations, I guess," Scott said.

"What'd he say about the strike?"

"Not a damn thing. Smart cookie."

"Looked like a nice old gent to me," said the rewrite man.

"Yeah," said Scott.

Scott Warren asked his top feature-writer what he thought, off the record, of the possibility that the spacemen's union, or a union man, was sabotaging the cargo rockets.

"Not a chance," said Ross Parsons. "They couldn't get near one of those scab ships if they wanted to."

"'So-called scab ships,'" corrected Scott; "remember the objectivity of the newsmen."

"I thought this was off the record," Ross said. "You can edit my copy all to hell, but you don't have to blue-pencil my conversation."

"Don't get sore," Scott told him.

"Well, I am. The labor situation on this godforsaken planet stinks. The spacemen's union, and other unions, have had an uphill battle all the way. You remember the goon-squads the Rockheads used when they were in power here, and how World Government just looked the other way. I thought union-busting would end when the Rockheads were voted out and Murahn's government came in, but is this situation any better?"

"How do you mean, Ross?"

"You know damn well what I mean, Chiclie," the reporter said sarcastically. "The spacemen have a just demand. They want a mere fifteen percent increase and decent retirement benefits, in exchange for risking their necks every trip—and what happens? Interstellar Carriers won't even bargain with them. The outfit gets up on its high royal horse and sits tight. And what does World Government do? Nothing. A whole month has gone by and the most W. G. has done is to say 'Come on, gate, let's mediate.' The union's willing, but I. C. sits and waits for Mars to starve. And the hungrier the people get, the less thinking they do and the more they blame the union."

"World Government has to abide by Martian law," Scott pointed out. "And until the Martian parliament declares an emergency, W. G. can't step in."

"Parliament's riddled with big busi-

ness interests," Ross Parsons said.

"Every time some bigwig, like Sargin of Interstellar, makes a speech, some fawning lawmaker gets up on the floor and inserts it in the Record. Labor hasn't got a lobby, much less influence, and it's hamstringed at every turn. Frankly, I'd be hard put to blame some poor spaceman if he poured sand into the works of one of those scab rockets; but, as I say, there isn't a chance. They've got special constabulary, goons and private cops three-deep around every ship."

"That's all I wanted to know," said Scott.

"Okay," said Ross. "So now you know; is that all?"

"That's all."

Ross went out of the office, jamming on his hat.

Scott Warren shook his head after him. Hot-headed as they come. But with editorial supervision, Ross Parsons was a first-rate reporter.

ATKINS, WHO had taken over Art Roper's labor beat, called in a brief item.

"Dateline," he dictated to the rewrite man. "Sargin, of the board of directors of Interstellar Carriers, announced today that I.C. has set up a special fund to provide lifetime-pensions for the wives, and other dependents, of men who have died in the crashes of cargo-rockets since the spacemen's strike began. He said every effort is being made to maintain the high safety-standards the firm has chalked up since Earth-Mars voyages went on a scheduled basis. Inspections, he said, have been made more rigorous; and the supervisory-personnel, who operate the cargo-ships, are triple-checked for experience and fitness, to assure the utmost in precautions for their personal safety, and the prompt delivery of much-needed supplies to a starving Mars blockaded by the month-long walk-out."

"Watch the propaganda," said the rewrite man.

"Yeah," said Atkins. "Better cut that to 'delivery of supplies to Mars.' There's more, but it's a blast at the union; nothing else about the widows and orphans. That enough?"

"That's enough," said the rewrite man, "unless he says how much the pensions are."

"He didn't say."

•

A coded message came from Galactic News' New York bureau to Scott Warren in Iopa. When it had been run through the office decoder it read:

*Mars-Earth hop semi-fruitful.
Suggest check age, insurance
coverage crashed rockets. Mars-
bound trip slated for Tuesday.
Roper.*

Scott called GN's insurance agent and asked for a confidential look-see into Roper's lead. It took thirty-six hours, but it was worth the wait. The report said each of the Interstellar craft which had crashed was due to be scrapped within half a dozen trips as over-age; and that each had been covered to the hilt by insurance—with extra premiums paid to provide against any possible contingency, from meteor swarms to sabotage. The report was marked "Highly Confidential." It was delivered in person by an executive of the insurance firm. Scott thanked him, assured him that the report wouldn't be used in a story without proper clearance and locked it in the office safe.

A second message arrived from Roper late Monday night:

*Confirming Tuesday departure.
Rocket Flight 423. Cargo: beef,
drugs. Eight crew one passenger.
Roper.*

•

Vibrations shook the old cargo rocket. Art Roper was getting pretty

hored with the trip. The crewmen didn't have much time for conversation. Six of them were Earthmen, no longer young, who had been graduated long ago from the actual work of running space vessels to desk or terminal jobs with Interstellar Carriers. They were rusty about operational-matters, and the tasks they'd been given after so long a lapse demanded constant attention. The other two crewmen were Martians; Art found it hard to tell their ages.

The reporter had given up trying to make himself useful aboard and was lying on his bunk in his cramped cabin, trying to read. He'd also given up trying to pump the crew for any further information. All he'd got so far was gossip. The one scant lead about the age of the emergency vessels had come from the gripes of the crewmen. His suggestion that Scott Warren check up on the insurance had been pure hunch. He wondered how it had come out.

Art was about ready to admit that he'd wasted his time, and Galactic's expense-money, when there was a knock at the door and one of the Martians came in.

"Sit down, pal," said Art. "Good to see you."

The Martian smiled and said, in very bad English, that he preferred to stand, but that if the mister Roper had some more of what had been in a certain bottle, he'd be appreciative. Art grinned and poured two drinks. He proposed a toast: "To President Murain of Mars."

"I will drink not to that," said the Martian.

Art was surprised. "Why not?" he asked.

"Not a good man," said the Martian.

"Okay," said Art. "I always thought he was; but your politics are your own business."

The Martian—a roly-poly man with a childlike face and black hair that sprawled in a tangle on the top

and sides of his head—drank quickly and held out his cup for a refill. Art passed him the bottle and said: "You've been with I.C. a long time, haven't you, Liga?"

"Long time." The Martian drew himself up proudly.

"Old hand." He looked at Art wisely. "And know much."

"I'm sure you do. I don't know anything at all about your work, which must be very interesting; much more so than mine. Let's drink to your boss—that fine Martian gentleman who is head of I.C.—Sargin."

"No!" The Martian's word exploded. "Murain no good; they say. But Sargin worse. This I know; I spit." He spat.

Art pulled in his feet and said mildly, "Is that so?"

"That is so. Just hear newscast on ship radio. About pension for wife of my cousin. My cousin killed in crash. One of those. You know."

PATIENTLY, Art Roper fed liquor and leading questions to Liga, the Martian crewman. What the answers added up to, was that Liga's cousin also had been a crewman on board a rocket; he'd been one of the supervisory-personnel, like Liga, who'd been called back to space duty.

Against a background of what Art knew about the penury in which many middle-aged Martians lived—because they were creatures, habituated to the ways of a since-deposed regime—he learned something of the almost mystical devotion of a Martian male to his wife. Behind this devotion lay an answer to much of the heaviness of a Martian male. The Martian's disregard of physical danger was legendary; only now did Art learn that it was also economic. He would go through anything for money—money for his wife and family. And so Liga's cousin had sabotaged a rocket ship.

He'd blown himself up with it, on orders, thinking that his act of sacrifice would provide his wife and family

with the security he'd never been able to assure them.

But Liga had just heard a newscast. Liga wasn't very bright, but the story was plain enough for anyone to understand. It said that the pension of his cousin's widow—so magnanimously provided by the company—wouldn't even pay her rent. And so Liga was rebelling.

Art was on his feet. He seized the tipsy Martian by the shoulder. "Do you mean that you've had orders to sabotage a ship? *This ship?*"

Liga nodded ponderously.

"But you're not going to do it. Is that right?"

Liga shook his head. "Done," he said.

"Listen, man," said Art Roper, "this is no time for conversation. How do we stop it?"

"No way."

"Of course there's a way. What did you do?"

"Too late," Liga looked at Art's watch. "Ten minutes. Boom. Too late." He looked mournfully at the reporter. "Sorry. Shouldn't make you die. Sorry. But too late."



Cargo-Rocket 423 blew up in the night sky of Mars with a flash that was clearly visible from Iopa. Scott Warren saw the exploding pinprick of light from the office window. Half a minute later a reporter at space patrol headquarters called in a confirmation.

It was a shaken Scott Warren who dictated to the operator:

"Flash. Fourth interplanetary rocket explodes.' End it and time it off. New Item. Urgent. IOPA, MARS—(GN)—A cargo rocket ship exploded tonight on the last leg of its trip from Earth to Mars. It was the fourth space vessel of Interstellar Carriers to meet disaster since the spacemen's strike began five weeks ago. Tonight's blast was clearly visible in the Martian sky. Nine persons—

eight crewmen and one passenger—are believed to have perished in the explosion.' End that and time it off."

Scott sat down at his desk and lighted a cigaret with shaking fingers. "Art Roper was on that ship," he said.

"I know," said the operator. "What a hell of a thing. Here's a message coming in from New York. It says: *Upfellow soonest with blast lead. Hottest here. Get GN staffer up high.*"

"Callous sons," Scott snatched out the cigaret. "All right. Put this out: 'Galactic News Bulletin. Lead Cargo-Rocket. Dateline. Half of Mars witnessed an explosion in the night sky which marked the fourth time in five weeks that a cargo rocket of Interstellar Carriers has met disaster on trips between Earth and Mars. It is feared that all nine persons aboard Earth-Mars Flight 423 perished tonight in the blast which occurred as the ill-fated vessel neared its destination. This would bring to a total of thirty-five the number of persons who have died as the result of such tragedies since the start of a strike by the Interplanetary Spacemen's Union and since Interstellar resumed flights manned by supervisory personnel.' Period, paragraph.

"The nine persons presumed dead in tonight's explosion in space include—in addition to eight crewmen—Arthur Roper, who was a reporter for the Galactic News Service bureau in Iopa. Roper had made an emergency-trip to Earth to visit his father in Montreal, who was reported seriously ill..."

SCOTT FINISHED dictating the bulletin lead and slumped back in his chair; sometimes he hated the business he was in. Everything could be reduced so easily to a common denominator. Tragedy was a word you used to lend drama to a story; disaster was only a synonym. Death was news-copy, and a friend who was

killed was a statistic—a name you'd be sure to spell correctly.

Scott swallowed and said across the room: "Gene, will you get out the personnel file on Art? We'll have to do an obituary."

He didn't really need the file; most of it he knew. Thirty-one. Born Ste. Anne de Beaupre. Beautiful name; nice guy. Seven years with Galactic News. Wife's name Margaret. Make it widow, now. Former reporter with Interplanetary News. The opposition. No matter. I. N. will be doing an obit, too; they'll be calling for background. Grind it out, send it out. File it to Earth, who'll forget it tomorrow. But now they want it fast. "Hottest here," they'd said.

"Thanks, Gene," said Scott. "I'll do it myself. Take the calls for a while, will you?"



There was a crackle from a receiving set at Scott Warren's elbow and he turned up the volume in a semi-conscious motion. The message was coming in scrambled and Scott flicked on the automatic decoder, —calling *GN Iopa*. Roper calling *GN Iopa*.

Scott whirled to the sending set and tuned it to the coordinates registered on the receiver. "Warren acknowledging Roper. Warren acking Roper. Go ahead, Art, for Lord's sake."

Art Roper's voice came through the static. "Thanks for the obit, Scott, but it's premature. Here's a bulletin: 'Dateline Somewhere in Space. Four men survived tonight's explosion of a Marsbound cargo vessel. A life-raft, launched minutes before the blast occurred, carried to safety three of the eight crewmen aboard and the lone passenger.' Are you getting me?"

Scott yelled to the operator. "Bust what you were sending and flash that story from Art. Did you get it okay?"

"I got it," the operator said. "What a story!"

Scott hollered into the transmitter.

"We're getting you, Artie-baby! Can you dictate a lead direct to the operator, you old so-and-so?"

"It's a pleasure," crackled Art's voice. "You get the space patrol in on this rube-rub, and I'll dictate till I drop. Here we go: 'Galactic News Bulletin. Lead Survivors. Dateline Somewhere in Space. An abortive piece of sabotage aboard a cargo-rocket, Marsbound from Earth tonight, exploded charges which had been hurled against the spacemen's union right back into the face of a high official of the strikebound Interstellar Carriers, Inc. Nine supposedly-doomed men took off from Earth on Tuesday aboard I. C. Flight 423 with a cargo of beef and drugs—and a plan of disaster worked out by an individual, to whom the lives of innocent men weighed little against the promise of monetary gain. This story is being dictated from a life-rocket by one of four survivors in a plot whose enormity has seldom been matched. He is a reporter for Galactic News Service, who made the trip knowing full well that the rocket-ship might never reach its destination.' Period, paragraph.

"With these words he personally indicts the Martian ex-Rockhead Sargin on charges of having wilfully murdered'—wait till I figure this: eight times three is twenty-four, plus five is twenty-nine—okay, pick it up here: —'wilfully murdered twenty-nine employees of his own firm, in an attempt to blame the spacemen's union for the sabotage which he himself committed..."

SARGIN was defiant as he stood in the dock under the pointing finger of the Martian government prosecutor. His heavy-lidded eyes looked at the ceiling with an air of wounded innocence as the words came:

"The government of Mars, having heard the verdict of the jury which found the defendant guilty of first-degree manslaughter, asks that the court mete out the maximum penalty—both as befits the enormity of the

individual crime, and as a warning to those who might in the future seek personal or corporate gain at the expense of innocent lives. Not only has the defendant been found guilty of having caused the death of thirty-one human beings—both from his own planet and Earth—but the evidence has shown that he wilfully deprived the planet of much-needed foodstuffs and medical supplies, leading to widespread deprivation and unnecessary suffering..."

The court sentenced Sargin to the maximum penalty—life imprisonment.



The strike was settled forty-eight hours later. The spacemen won all their demands in a mediation session, which found the representatives of Interstellar Carriers humbly anxious to disassociate themselves from Sargin's actions and to win back the favor of the public.

Art Roper, forced into the role of hero, stood with President Murain of Mars during the ceremonies which saw the first post-strike rocket blast off toward Earth.

Scott Warren had a hell of a time getting World Government Investigation to turn Art loose long enough for him to write a signed piece telling how it was he happened to crack the story.

Finally Scott and Art were alone in a sandcar, driving back to lops from the spaceport.

"Okay, you hero," Scott grinned, "now spill it."

"My dear chiefie," said Art, unhooking the scarlet-ribboned medal President Murain had pinned on him, "it was a mere matter of applying the

principles of newsgathering to interplanetary skullduggery. First you hutter up your subject, and then you listen.

"Sargin, as those old files indicated, was one of the silent partners of the old Rockhead dictatorship on Mars. Through his connections and influence, he got himself cleared white as a lamb when the Rockheads were elected out, and when the W.G.—approved Murain government came in. His connections reached high and low—and among the lowly was Liga.

"It was just luck that I happened to get chummy with Liga. It was even more lucky—for me, at least—that his allegiance to Sargin vanished after his cousin got killed and Liga found out the truth about that miserable survivors' pension. That's when he rebelled—with ten minutes to spare. Just barely time for him, and me, and all the others we could find, to take off in the life-craft. You were an eye witness to the rest of it, I believe."

"That was my privilege," said Scott, "if that's the word for it?"

"Had you worried for a while, didn't I?"

"Oh, I coppered my bets; I only had you presumed dead, you know."

"I'll thank you, Scott, to presume less on my life in the future; it's the only one I've got."

"You fed yourself into it, Arthur lad; don't blame me. I still don't know why you were so anxious to go harreling off in one of those death-traps."

Art grinned. "Confidentially, Scott, and don't tell Mars Hydroponics, I did it to get a good cup of Earth coffee."



Another "Dateline Mars" story by

Richard Wilson

NEW WEAPON, will appear soon

ROAD TO ROME

An Odd Tale by David Grinnell



HERE ARE three items that are bothering me. When you get as old as I am, and have nothing to do all day except sit on the porch and watch your grandchildren play, you have plenty of time to find things to get bothered about. You get a chance to put together all sorts of unrelated items that nobody who has to earn a dollar would have the time for.

I think the three items may be all one—but I'll let you be the judge of that. To begin with, I would say that the first was sort of brought back to mind in 1947, when the A. E. C. asked me to look over some of the old records of my son's company—which used to be mine until I retired in 1939. That would be the Warendyck Chemicals Corporation. You may have run across it: It isn't one of the real big ones, like DuPont, but it was a fair-sized firm with its own little building; it made me a good living, and makes my son a good one now.

The A. E. C., it seems, was looking over a lot of records from all the companies, large and small, that ever handled a certain product. They wanted to know who had bought it, and how much, and where the stuff had gone. They found this particular item on our books about a customer we sold only once, and never saw again, and they wanted to know more. My son couldn't tell them, so they came out here—two nice young men in a nice car, and they asked me all about it.

I went down to the plant with them—though I don't usually go travelling on account of my arteries—and I looked at the old ledgers. Then I thought about it for a while, and recollected the whole incident. I'm afraid it wasn't much help to them, but for what it was worth, this was the story.

It was in 1932, and times were pretty bad. We were still making out, squeezing through, but we were pretty hungry for new customers. My secretary informed me that morning that there was a man come up to see me. "On business?" I asked, and she nodded.

She let him in. I got up, went to shake his hand, but he ignored me. I let it pass—though I usually like to be polite—because I could see that he was some sort of foreigner, and very likely didn't know any better.

"You iss zhe Warendyck?" said the customer, a sort of darkish, thinish, and drawn-out man, wearing what looked like homespun and probably home-made clothes.

"I am Mr. Warendyck," I replied. "What can I do for you?" I waved him to a seat.

He stood for a moment, sort of puzzled, then drew the chair over to my desk awkwardly and sat down on the edge of it. He took a paper from his pocket and gave it to me. Glancing at it, I saw that it contained only the name of a chemical product.

"You have zhis for zhalc?" he said. I sat back in my seat and looked thoughtful. It's a good business practice never to look too anxious. As a matter of fact, I had a lot of the stuff; I was stuck with a big load when two of my best customers, who used to



order it regularly, went bankrupt within weeks of each other only several months before.

THE STUFF was not much use in general business. It was a chemical product almost entirely used by pottery and cheap chinaware firms for coloring. I had been trying to think of some use for it in the past weeks—so as not to get stuck too badly—but I hadn't turned up anything. This looked to me like a wonderful chance to dump the lot on a stranger. But I didn't let on.

"Yes," I said to him, "I think we can supply some. Just how much do you want and when do you want it?"

He leaned forward very anxiously, and started sputtering rapidly in some foreign language. I couldn't understand a word. He stopped, got control of himself, said slowly, "I wish to buy orl you can zhupply for shipment at once, wish no delay."

"I see," I answered, stalling for time to think of the best price I could get in those times. "Where would it be shipped to?"

He frowned a bit, hesitated, then said, "Rome."

"Rome, New York, or Rome, Italy?" I asked. But he only shook

his head and waved his hands. "Rome," he repeated.

I buzzed my secretary. When she looked in, I asked her to call in Manetti, one of my two remaining chemists. In a few minutes he came in brushing his hands against his smock. "I think this gentleman is Italian. Could you ask him who he represents and what they intend to make of their purchase?"

Manetti nodded and said something to the customer in Italian. But the stranger only looked blankly at him, and waved his hands helplessly again. He said something to Manetti, but then it was my chemist's turn to look perplexed. Manetti turned to me and said, "I don't think he's Italian, sir. At least, he's not saying anything I can make head or tail of."

I nodded, and dismissed him. The stranger turned back to me. "I do not unzherstand. Can shell me thizh product or not?"

I apologized to the man, and then said, "I happen to have some of this for immediate delivery. How much do you want, and how will you have it shipped?"

He smiled then, for the first time. "I will tage orl you have. We will ship it ourselves by our own truckas."

Anyway, we set a price; in fact he agreed to the first price I gave him. He was really in a hurry, and he wanted delivery that very afternoon. This was rather irregular, particularly if he was going to trans-ship it to Rome, for usually we had to fill out the bills of lading ourselves. But he wanted the stuff; this was the depression; and I was relieved to get it out of my warehouse.

What our records showed, when the men from the Atomic Energy Commission dug out the old 1932 ledger, was simply that we had sold six hundred and thirty-seven pounds of powdered uranium oxide—intended for use in coloring cheap chinaware—for cash

to a party (name not given), for shipment to Rome, Italy. At least, the man never said it wasn't Italy, and I'm sure it wasn't the place upstate in New York.

THE SECOND item was something I read in the morning papers last year one day while sitting on my porch. I have nothing much to do, as I said, and I read just about everything in the papers—including the auction-notices and the want-ads. Anyway this was a little boxed item on the front page. It said that the astronomers had noticed what looked like a big atmospheric disturbance on the planet Mars, just the day before. A couple of observatories—one in Arizona and one in Japan—happened to be looking, and there was this big sudden rise of cloud and dust, just miles and miles high. It looked, said one astronomer, just like a huge tornado or a volcanic eruption. Only, said this professor, there aren't any volcanoes on Mars; so it

could even have been a tremendous atomic explosion, just as if a real super-atom bomb was dropped.

The third item was something that I had a local astronomy bug work out, a fellow who made his own telescope, and who sits up all night when he should be sleeping. He's good at figures; so I asked him, just out of curiosity, to figure out just what astronomical body was closest to Mars at the time of the eruption, or whatever it was. He worked it out, too. It took him almost two months figuring' the orbits of asteroids, and comets, and things. He says it was an asteroid numbered 472 that was the closest to Mars at the time. It passed by within less than a half a million miles—which I am told is considered real close by space measuring.

It just happens that Asteroid 472 has a name, as well as a number. The name is Rome.



UPON WHAT THE EXPEDITION DID, HUMANITY DEFENDED!

The Verdes brothers, and Mary Karen, knew something of the Laxarites' power, knew for sure that an attack upon them would be fatal to Earth. Because the three of them had been imbued with an unbelievable, but nonetheless real, case of



DOUBLE IDENTITY

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DYNAMIC SCIENCE FICTION

MARTIAN RITUAL

by Philip Latham

(Illustration by C. A. Murphy)

None of the theories, or even the wildest guesses, about the origin and purpose of the Martian canals were close to the facts . . .



ANTHONY said, in a matter-of-fact voice, "Yes, I learned the secret of the canals. The trouble is," he went on, frowning slightly, "I can't tell you about the canals without first telling you something about the Martians themselves. Otherwise it won't make sense at all."

The crowded conference-room became very quiet. This was what they had been waiting to hear; this was the big moment, the payoff. They had heard the details of the takeoff from Earth, the journey of millions of miles across space to the Red Planet, and the landing on the Sabaeus Sinus. But most of that was fairly well known beforehand. Now they had come to the part that nobody knew but one man—and that one man was Dick Anthony,

the speaker on the platform, the only man in the world who had ever gone to Mars and returned to tell the story.

"As I said," Anthony continued, "you've first got to grasp the peculiar psychology of the Martians before you can grasp the significance of their canals. But when you come right down to it, the Martians really aren't so. . ."

"Ladies and gentlemen," a smooth persuasive voice cut in. It belonged to Dr. Herbert C. Woolard, president of the Society for Spatial Research. He had risen quietly from his seat on the platform behind the speaker and was surveying the audience with a bland smile. "Ladies and gentlemen," he repeated, "I am not exaggerating when I say that no one could possibly be more anxious to hear the results of

Mr. Anthony's trip to Mars than I. But we must also remember that barely two days have elapsed since his return to us. He had now been answering questions continuously for nearly three hours. After his journey to a world where he was dealt with so kindly, we cannot treat him with less consideration on his own planet. Therefore, I suggest that we adjourn to the dining-room below where a buffet luncheon has been prepared for members of our society and gentlemen of the press. Let us meet in these chambers an hour hence, when Mr. Anthony will answer the questions we have been waiting with such impatience to hear."

There were a few groans of disappointment from the audience, but most of the crowd took it cheerfully enough. Anthony found himself instantly surrounded by half a dozen directors of the Society who formed a buffer-ring around him.

Woodard caught him by the arm. "I've reserved a table by the window," he said. "Maybe we can get some privacy there. We've been besieged for a week—ever since the news leaked out you were on the way home."

Daly, the secretary, laughed grimly. "Back in the '50's we thought we were doing well when a couple of hundred turned out for a meeting. Now we need the police to handle the crowds."

"And a lot of members dropped out when we boosted the dues from five dollars to ten dollars," Elliot, the treasurer, added. "Since Anthony got back, at least ten firms have called up tactfully inquiring if the Society has any stock for sale. It's the same old story all over again. Why are people always the same?"

THEY ENTERED the diningroom and queued up at the end of the line leading to the tables where the buffet luncheon was spread. The room was decorated in a highly original style. On the east side were stained glass windows ornamented, with the

fundamental equations of space travel; Newton's law of gravitation; the vis-viva integral; Kepler's harmonic law; and diagrams of the conic sections. At the south end hung a life-size painting of Joshua White, former president and founder of the Society, who had been killed in one of the early attempts to reach the moon in the '60's.

The entire west side was devoted to a series of illuminated panels, depicting successive stages in the conquest of space—such as the Wac Corporal boosted by a V-2 back in the late '40's; the *Clothes II*, first artificial satellite, sinking behind the horizon at Quito; the crumpled form of the *Atreides III*, first robot rocket to reach the moon, as it was found on the floor of the Sinus Iridum; and the *Lachesis III*, the first man-carrying rocket, poised for flight near the crater *Russell Porter*. There was also a long glass-enclosed case, containing specimens of lunar minerals; models of famous rockets; and other items of historic interest.

Elliot helped himself to generous portions of sliced chicken and potato salad. "Where do they hide the coffee?" he demanded, with obvious irritation. "As long as I've been in this place, I've never yet been able to get a cup of hot coffee."

"Tell one of the waitresses," said Daly. "They have to bring it in from the kitchen."

"Why can't they brew it right here in the diningroom?"

"My dear Elliot," Daly replied, "when you try to change the coffee-routine around here you're really backing something big. Thirty years ago, our revered president—the late Mr. White—ordered that the coffee be served from the kitchen; it has been served from the kitchen ever since. Everyone agrees that it would be much easier to brew it in the diningroom, but there is absolutely nothing that can be done about it. Luke-

warm coffee is one of our most cherished institutions."

Anthony smiled but said nothing. He noticed that he talked much less than formerly; two years in the solitude of a spaceship had made silence a habit. But he also found that he could concentrate more effectively, focus his thoughts better.

The director's table was nearly filled when the three men arrived warily, threading their way through traffic. Anthony chose an inconspicuous spot partially hidden behind an archway. He was constantly aware of the eyes turned in his direction, noting every move he made, questioning his every look and gesture.

So this is *James*, he thought to himself. It was pleasant in a way; he might as well be honest about it. Only...now that it had come, it didn't seem nearly so important as he had anticipated.

"Now, boys, let's give Anthony a rest," Woolard cautioned, tucking his napkin in around his vest. "No questions. He's had a hard morning and he's not through yet—not by a long shot. I want to hear about those canals the same as the rest of you, but we'll all find out in due time."

ANTHONY listened to the snatches of conversation tossed back and forth across the table with a sense of detachment he had never experienced before. Those long hours in the spaceship, when there was nothing to do but gaze at the stars and ponder upon the meaning of human life and the reason for human existence, had developed an understanding of himself and of other people he never could possibly have gained in the rush of events at home. Often, after long periods of intense thought, there had been moments when his mind had strayed into such strange channels that he wondered if he were entirely sane. They had been wonderful moments, too. Moments when he felt a

sudden kinship with the whole universe, a sense of oneness with time and space and eternity that was so exquisite it left him exhausted for hours. But that was all behind him now; his feet were firmly on the ground again.

Across the table, an animated conversation was going on between Wilkinson—a sociologist with a leaning toward philosophy—and Pollard, an astronomer-meteorologist.

"How about giving us some of your ideas on planetary colonization at the next meeting of the Weather Ways Club?" Pollard was saying. "Whether the colonies should exist primarily for the benefit of the Earth, as outposts of empire, so to speak; or whether they should be given full rights from the start."

"I doubt if I can contribute much you don't already know," Wilkinson replied. "It's an old problem, of course. When is your next meeting, by the way?"

"Two weeks from this coming Saturday."

Wilkinson consulted a calendar in the back of a notebook. "In that case, I'm afraid I'll have to beg off. That happens to be the Saturday before Halloween, and my wife's arranged a big party for the kids, Pumpkins, blackcats, a bonfire in the backyard—all the usual rigamarole. If I failed to show up in a sheet and false face at the critical moment, the family would never forgive me."

Pollard laughed. "I know how it is. My wife had a party of the same sort last April Fool's day; I had to be on hand to pull strings and make shadow-pictures behind the scenes. The kids certainly attach a lot of importance to those things."

"Adults are just as bad," Daly remarked. "Ever hear the reason why they postponed launching the *Atropos III* for a week? It was all set to go on November 3rd, you'll remember. Then Clemson, the banker, made a hell of a row—insisted that the date be set

back a week. Since he'd put up most of the money for the project we had to give in. Some people were pretty sore about it."

"I remember it very well," Anthony said, speaking for the first time. "I was in charge of the mathematics section then; it made us a lot of extra work."

"Well," said Daly, "you can believe this or not but the old boy balked because the date fell on Friday the thirteenth. Nobody had noticed it but him. Later I found out that he consults an astrologer regularly. Wouldn't think of launching one of his big deals if Venus and Jupiter were in the wrong aspect in Aquarius, or some such foolishness."

WILKINSON shook his head sadly. "And to think he's worth millions, too. While really smart people like us can barely make ends meet."

"Come to think of it," said Pollard, "I've noticed that Clemson wears a rabbit's foot on his watchchain, but I never thought anything about it before."

"Just goes to show the power of money," Wilkinson mused. "You can be as crazy as you like, as long as that old dollar-sign is in there working for you."

"Speaking of money," said Daly, "I read the other day that the government is adding a new vault at Fort Knox. It seems we've got so much gold there isn't room for it anymore."

"Hm. Wonder how many billion dollars worth of the metal they've got in storage now," said Pollard.

"Hard to say," Daly replied. "Tons and tons probably. Enough to keep us in rings and bracelets and other trinkets for the next thousand years."

"Sometimes," said Anthony, "I wonder if we have any gold at Fort Knox at all."

Everyone within earshot turned to

look at him. For several seconds no one spoke.

"Why, what makes you say that?" Wilkinson inquired.

"Well, do you know that there is any gold at Fort Knox?" said Anthony.

"Certainly.... At least, I have every reason to believe so."

"But do you actually *know* it?" Anthony insisted. "Have you ever seen it with your own eyes?"

"Naturally not," Wilkinson replied, a bit stiffly. "I imagine very few people have."

"That's the point," said Anthony. "Suppose there was no metal of atomic number 79 there at all. Suppose that, as the result of an earthquake, the ground beneath Fort Knox opened and swallowed up our gold-supply. Do you think it would make any difference to us?"

"The effect would be disastrous," said Wilkinson promptly. "The marts of the world would be unsettled immediately. In the last analysis, our whole economic system is tied to gold."

"But what if the disaster were kept a secret?" asked Anthony. "That instead of proclaiming it to the world, everything went on just as usual. Except that a news-story was released to the effect that a new vault had to be added to hold our swelling gold-supply."

Wilkinson regarded him with a quizzical expression. "That would be a rather large secret to keep, I should think."

"Yes, I daresay it would," said Anthony thoughtfully. He let the subject drop as if he had lost all interest in it.

President Woolard ostentatiously consulted his watch, glanced at Anthony, and rose portentously to his feet. "I see it's ten minutes after two," he said, brushing the crumbs off his lap. "How about it, Mr. Anthony? I confess I'm getting awfully impatient to hear about those canals."

"Any time," Anthony agreed, snuffing out his cigarette.

"Then let us hic ourselves upstairs," Woolard said. "Some of the newspaper-men have deadlines to meet."

On the way upstairs Wilkinson fell into step with Pollard. "Does Anthony strike you as being a bit queer since his return from Mars?" the sociologist inquired. "What do you think he was getting at there at the table?"

Pollard shrugged. "Two years by yourself out in space is likely to unhinge almost anybody; it's practically a foregone conclusion."

"I suppose you're right," said Wilkinson. "We must make allowances until he has had an opportunity to adjust himself."

THE CONFERENCE-rooms seemed even more crowded than before. After considerable debate, the directors had decided to allow the press to hear Anthony describe his trip to Mars and to answer questions, but had banned the numerous offers to broadcast the program. They hoped that, by resisting all efforts to commercialize upon the success of the venture, the interplanetary project might be given some semblance of idealism. There had also been considerable concern expressed over Anthony's ability to withstand the prolonged strain that such a broadcast would entail. Everyone admitted that he had changed radically. He seemed older—not so much in his appearance as in his personality and general demeanor. It would never do to have him crack up in the middle of the proceedings.

Anthony resumed his place on the platform, between Woolard and Elbot. He sat in his chair with his knees crossed, as if thoroughly relaxed, letting his gaze wander over the crowd assembled to hear him—from the lay members of the Society and the newspaper men in the back rows, down to the officers and directors near the

front. Here and there he found a face that he still recognized. There was MacMathews, the anthropologist from the University of Michigan; Fisher, the paleobotanist; and Pollard and Wilkinson side by side a few rows back. Others he knew only slightly or by reputation and there were many more that were strange to him, newcomers who had joined the Society since his departure for Mars.

President Woolard called the meeting to order. "I need hardly say that we now come to the long-awaited climax of our gathering here today," he said, beaming upon the assemblage. "Mr. Anthony will tell us the news the world has been waiting to hear, ever since that night in 1636, when Fontana first beheld the markings upon the Red Planet. Then a fresh impetus was given to Martian exploration a century ago when Schiaparelli announced the discovery of the *canali*, a discovery that started a controversy that has been raging to this day. Ah, my friends, what a great moment is ours! To be in this hall today and to hear this century old riddle resolved for us."

"Why doesn't he shut up and let Anthony tell his story?" Wilkinson muttered.

Woolard mopped his brow with a large colored handkerchief before proceeding. "And so, this afternoon, it is our honor and privilege to hear the answers to two questions that long have puzzled us: is there life on Mars, and what are the canals?" He bowed. "And now once more I give you the farthest space traveller of them all—Mr. Richard Ulysses Anthony."

There was a tremendous burst of applause as Anthony advanced to the rostrum. "Before telling you about the canals," he began, "I would first like to refresh your memory regarding them by calling upon our distinguished astronomer-meteorologist, Dr. Pollard, to describe them as they appear through the telescope."

Pollard, who had gotten comfortably settled in his seat for the afternoon, now suddenly came to life again.

"Well, different observers describe them in different ways," he said, getting reluctantly to his feet. "In fact, some astronomers have never been able to see them at all. Attempts to photograph the canals with the 100-inch at Mount Wilson at the oppositions of 1954 and 1956 were not conclusive. Not until photographs were secured from the lunar observatory on the Mare Serenitatis, in 1973, was the existence of the canals finally settled beyond doubt.

"Astronomers are now agreed that the canals consist of fine lines of extraordinary regularity, embracing the planet in a network. With few exceptions the canals follow the arcs of great circles without a break for hundreds and even thousands of miles. Once the reality of the canals was established, the big question immediately became 'What can they be?' There is no natural surface-marking we can conceive of that could imitate their appearance. Lowell's old theory that the lines are true canals never was taken seriously. The canals look as if they were simply fine lines drawn upon the surface. What they really are, I would not dare hazard a guess."

He sat down and gazed up at Anthony expectantly.

"Thank you, Dr. Pollard," said Anthony. "I have also spent a good many hours wondering about the canals, ever since I first saw them through the telescope on the moon. They have a curiously-artificial appearance, as if they were the work of intelligent beings. But why should intelligent beings cover their globe with a maze of spidery lines? It was a question that seemed impossible to answer from our stations here. Gradually the conviction grew that if we were ever going to find that answer

we must go to Mars and view the canals with our own eyes."

HE HESITATED as if groping for the proper words to express himself. A rustle of expectancy ran through the audience.

"Well, I have been to Mars and seen the canals for myself," he continued. "I have walked along the side of the canals; I have examined the stuff that they are made of; and I have inspected dozens of them where they meet at some oasis. I can tell you what the canals are, but I still can't tell you why the Martians put them there. The trouble is," he said, speaking very deliberately, "the Martians don't know why the canals are there themselves."

A gasp went up from the auditorium. People turned and stared blankly at their neighbor.

"I often wonder if astronomers sometimes outsmart themselves," said Anthony, with a glance in Pollard's direction. "An astronomer never by any chance believes that the object he sees in the sky can be simply what it appears to be. Back in 1914, for example, they entertained a theory for awhile that the dark spots on the sun are not dark spots at all but illusions produced by anomalous refraction in the solar atmosphere. They thought that the glistening white polar caps of Mars could not be snow and ice, but must be frozen carbon-dioxide gas. Likewise they refused to believe that the line-like markings could be simply what they appear to be—fine lines inscribed upon the surface and nothing more.

"Well, ladies and gentlemen, that is all the canals are: dark greenish lines about fifteen miles wide drawn over the ground with a colored material along the arcs of great circles."

The crowd received the news in silence. Then a low murmur of conversation began that rapidly swelled to a

roar. Anthony leaned against the table turning the pages of his notes apparently wholly unconcerned by the stir his announcement had aroused.

"Mr. Anthony," a voice called from the back of the room.

"Yes?" said Anthony absently, without glancing up.

"I would like to ask a question."

"Go ahead."

"My name is Appleton; I'm science-editor for the Haynes-Wilson chain. What I'd like to know is this: do you mean to tell us that there are intelligent beings on Mars who go through the enormous effort of marking the surface up into a kind of glossified football field without knowing why they do it?"

"That's right."

"I find that very hard to believe, Mr. Anthony."

"Yes, I expect you do. I found it hard to believe myself at first. Nevertheless, it's the truth."

"Look here," another voice demanded, "just what proof do you have to support that statement?"

Woodard bounded to the front of the platform in a single leap. "I beg of you, please," he said, with an imploring gesture. "Believe me, this is quite as much of a revelation to me as it is to you. But I beg that you allow Mr. Anthony to continue. After all, there would have been no point in making the journey to Mars in the first place if we had known what was there beforehand."

Gradually the room quieted down. When order was restored Anthony went on speaking in the same casual tone he had used before.

"Why the Martians should go to the effort of maintaining these markings, year after year, does at first seem incomprehensible, I'll admit. Yet the answer is really not so difficult to grasp as you might think. For to understand the meaning behind them we need only have a better understanding of ourselves."

Again there was an excited buzz from the audience.

"First, I want to say that the hypothesis advanced by Professor MacMathews that life originated upon Mars and the Earth at some pre-historic epoch from the same stock appears to be correct. Aside from certain superficial differences—less than those that distinguish us from the great apes—man and Martian are essentially the same."

MACMATHEWS, who had been sitting on the edge of his chair ever since Anthony started talking, now sank back with a relieved expression. Several of his colleagues reached over to shake his hand.

"But Martian civilization is much older than ours," Anthony went on. "The Martians had attained a high degree of civilization when the dinosaurs still roamed the Earth. But whether beings from outside the solar system settled upon Mars and the Earth at about the same time and perished upon our planet, or whether life originated first on Mars and then later migrated to Earth, it is impossible to say. All I can say is that the Martians are so much like ourselves that there can be doubt concerning our common origin."

"Can you realize what it means to have a civilization that is not thousands, but millions of years old?" said Anthony, speaking with great earnestness now. "It means that the problems that keep us in such a turmoil here on Earth are unknown there. The population of Mars, which I should estimate at around fifty million, has reached a pattern for living which they have not the slightest desire to change. They are in a state of completely stable equilibrium with their environment, and with each other. No difficulty ever arises that has not arisen before; no problem ever comes up that was not solved thousands of years ago. Hence there is no necessity for

creative thinking anymore. In fact, there is no necessity for real thinking at all on Mars."

A restless murmur rose till it filled the auditorium making further speech impossible. A number of voices were raised in the back of the room where some sort of altercation seemed to be going on. Presently a man edged his way along a row of seats and came striding down the center aisle.

"Dr. Woolard," he said, "I'm sure that I speak for many of us here who regret to say that we find Mr. Anthony's remarks altogether too incredible for us to accept. We fail to see that his rather poetic account of life on Mars can have any connection with the canals. In fact, unless more convincing proof is forthcoming very shortly that beings similar to ourselves would build and maintain these markings, we will be forced to the conclusion that this whole affair is nothing more nor less than a gigantic hoax gotten up by the Society for Spatial Research, for the purpose of gaining publicity that will aid it in securing the large sums needed to promote its various and sundry enterprises."

THERE WAS a wild burst of applause. Several of the officers were on their feet in an instant angrily confronting the speaker.

"This is an outrage!" Woolard shouted. "There cannot be the slightest doubt regarding the authenticity of Mr. Anthony's report. We received messages from him that could not possibly have originated at any other source than Mars. Later, he will show you lantern-slides made from photographs taken on the planet so that you may see for yourself the people and conditions there."

"How do we know he took 'em on Mars?" someone yelled. "He could have taken 'em in Death Valley for all we know."

"That's right," another voice cried. "He said the Martians looked like us,

didn't he? How can we tell the difference?"

"Explain the canals and we'll be satisfied," a dozen voices added from various parts of the house.

Anthony leaned nearer the microphone. "I said that to understand the Martians we need only understand ourselves. For their pattern of living already is infiltrating into our own. To us, this rigid set pattern seems absurd—yet similar absurdities even now can be found in our own lives.

"A Martian's life is governed by ritual to an extent that seems unbelievable to us. I have watched them performing long ceremonies, of whose meaning they are wholly ignorant. Yet they would not think of abandoning them; they still feel a powerful compulsion to go on performing them as long as life upon their world shall endure.

"But before we laugh at these poor dumb creatures, let us ask ourselves if we are not bound by similar habits here on Earth." Anthony was hurrying on now, warming to his subject. "Let me cite a few examples to make my meaning clear. As the end of October approaches we begin carving faces on pumpkins, decorating our houses with pictures of witches and black cats, and dressing up in sheets and false faces. On April 1st we play tricks on our friends by giving them loaded cigars and chocolates stuffed with cotton. Easter finds us busily coloring eggs and hiding them in the backyard. We spend considerable time and money on these rites. But how many of us here know how they originated, or why we continue to observe them with such meticulous care year after year?"

Nobody answered. The audience was quiet now, following his words intently.

"But these, after all, are only minor examples of ritualistic habits in our lives. Actually, without our realizing

[Turn To Page 81]

WHERE OR WHEN?

by Katherine MacLean

(Illustrated by O. A. Murphy)



A MOST WONDERFUL thing has happened. I was at my desk, looking out at the river,

and the small bridge that seems to be there just to improve the view—and someone's thoughts touched mine. He was looking at almost the same kind of a scene, thinking the same kind of a thought—I can't say exactly what—it was a fleeting mood, something about time and growth. Rivers and bridges change, too, I know, and the shoreline advances and retreats with the changing growth of reeds and grasses along the edge. And because it is spring, there are changes I can see even from day to day. It is spring for him, too; but there has been some rain where he is. The sky was still dark, but the sun was beginning to shine again, and grass along the river's edge sparkled with the wet. My river was bright and still, the growing grass dry; for a moment I could see both

scenes—like two dream pictures, both of them too peaceful to be real. Then he thought of something else, and we lost contact.

I haven't much time to finish work on my Doctor's thesis before the July first deadline—I really shouldn't spare a second from it—but it was a pleasant thing, and it is nice to pause and note down something unusual and good that happens like that. Fusions of thought, as I remember my notes from the lectures—persons of thought come with close similarities of mood or concept, and usually indicate some basic personality affinity. Unquote. They said it.

I shouldn't expect it to happen again, but I'm glad that we both looked out our windows at the same kind of scene and happened to think the same kind of thought—alike enough to become aware of each other, even if only for a second.

I shouldn't wander on like this—I have to keep all of my thinking for my thesis.

Thursday

It is difficult to concentrate when it is the spring of 2052, the most beautiful spring in ten years. A warm wind is ruffling the pages of my books, trying to close them, lifting and stirring my note-cards, trying to scatter them. The Fulton scholarship always assigns its students a room and desk and library service, here in this old estate, where we can finish our thesis in comfort—with, theoretically, nothing to bother us. But confronted with a scene like this, after the cold stone walls of city libraries and the ice and greyness of winter, I wonder how it affected the others. Perhaps I should pray for rain.

I've resolved to stay in the house and not let myself go out walking. There is too much that is pleasant and relaxing out there. The old Taoists that I'm studying have enough poetry about walking in the country; it will have to do for a while.

But I am restless. The warm wind takes more of my attention than it should, and everything seems different.

I wasn't going to write what happened; I was going to ignore it and keep my attention on work—but I have to record it to stop thinking of it.

Today, early in the morning, I got up to study. I sat at my desk a long time, looking out. I saw the sun brighten its first rays of dusty gold almost to full brilliance, and I saw the morning fog curl and eddy in the morning breeze and dissolve in the heat of the sunlight before I moved. But I was looking at another scene—another river—the trees were different, and the river edges curved differently; and the small bridge at the right was brown instead of white. But the fog was lifting and the sun brightening on this river, too. . . . He had gotten up early.

Saturday

I'm working well again, fully concentrating on my thesis, not moving out of my room except to walk down to the unobtrusive meals. The subject has captured me—Some Philosophies Considered As Ways Of Personality. It's exciting material. Some of the quietists, and especially the old Taoists, came close to describing our current personality-freeing techniques. Others in minor schools, not of the main line of Chinese Taoism, use poetry and maxims—to describe ways of looking at life—that give off a flavor and feeling of some different and interesting way of feeling. I hope I can get them formulated into English; they were apparently too different, or too subtle, or too nonverbal, for the Chinese idiographs the philosophers had to write in, and I have to use esp-concept communication-technique to find out what they meant. Even the Chinese could not agree on what they meant, and five different translators will give five different translations of any paragraph. It even causes trouble with concept-reading, for when I look at an idiograph and contact an associated-concept, it might not be the idea of the original writer; it could be the idea of some interpreter or translator, centuries later in time, but firmly attached by his conviction that he understood just what was meant. It is something of a struggle, deductively, to decide which is which; I've been footnoting a lot with alternatives and explanations of my choice. But my trouble with it is nothing to the problem I would have had if I had needed actually to learn to read the Chinese idiograph language. Thank the Lord for modern techniques.

"Like the reed that grows by the water and sways in the wind, and is silent to itself, anger not at yourself for swaying this way instead of that, or moving not as decided, be silent to yourself, for you are moved by a wind of the outside vastness, of the self-not-self, of the above and below and

around, the dance of the will." It is a good quotation, but the mention of reeds set me to looking out the window again. I had been avoiding looking out. The reeds bend on the edge of the river. They are green and look soft.

"*Bend easily to the wind.*" Live naturally, they mean; follow impulse. Is sitting indoors and writing a thesis natural? For a moment it seems dusty and artificial. "*Bird be bird, leaf be leaf, be happy growing, be contented falling.*" And if I followed my feelings...

I shouldn't distract him from his work—I shouldn't bother him, but—

I glanced up out of the window, knowing it would happen, wanting it to happen—and saw the other sunlit river superimpose on mine, like two color photographs—the other with a feeling of loneliness that was his.

It has a realness that frightens me. The course in concept-communication taught me that sometimes spontaneous linkages between mind and mind occur on a basis of similarities; but I wasn't ready for the fusion, the warm close oneness of it, the feeling of being *alive* in his body and in mine, too—as natural as if it had always been this way. I had just discovered it, as natural as if I had always known and just remembered.

He was lonely. "*I am here,*" I thought, or felt without words, groping and unpracticed at this wordless contact. "*I share what you see. I work, too.*" It reached him, and I felt his response—an attitude, a feeling; it is like trying to write down—as if it were words—the feeling of clasped hands.

I'm not sure he noticed the contact consciously; only that he was lonely, and then stopped being lonely.

I shouldn't go further. The next step would be to introduce myself in clear, focused thoughts starting between us the wonderful new-friends process of mutual exploration would be too interesting to stop. It would take too much time. We can't spare the time.

I wonder where his view is. I won-

der what country that little river winds through.

Tuesday

He made contact. He thought of me, and the thought made me aware.

He was remembering the feeling of being alone, and the feeling of companionship and company which followed it. He is lonesome again when he works now; he has been waiting for it to happen again, without realizing what he is waiting for—although the image of someone sitting in one of the chairs of the room and smiling has occurred to him—each time with a warm feeling, and a personality-impression which I realize is my impression. It is like unexpectedly meeting a mirror.

I am ashamed of myself for eavesdropping on his thoughts, and pleased and flattered.

There is a small boat-dock, with bright blue rowboats a little distance away down the river. If I lean close in the window I can just see it between the trees. I saw someone rowing past the mansion yesterday. He rowed with slow strokes that looked easy. When I try to row a rowboat, it spins back and forth and doesn't go anywhere. I wonder if his river is really my river just a little further downstream, perhaps just around the bend. Or he might be in Denmark—any place where there are such trees and small wandering rivers. Telepathy, as the course said, cares nothing for where or when, or for any gulfs of distance or time; it knows only of the gulfs of difference between person and person, and the nearness of kinships and likenesses. He isn't far away in thought, but I wonder where his river is—how far away from my river.

I keep feeling he must be close.

Friday

The Fulton History Fund has given me access to the best training and has paid the expenses of field-trips whenever I wanted. All they ask is that

their students produce intelligent reports that add to the knowledge of history, and prove that the fund-administrators are right in giving so much trust to students as young as I am. So far, I have been industrious and worthy of trust.

But the way I feel about the study is changing, suddenly it doesn't seem important. I shouldn't feel like this.

Professor Gordon wants to see my thesis when it's done. If I remember that it keeps me working. The kernel of wisdom and mellowness in the old philosophies is one of his delights.

How he'd smile if he knew how much I have to struggle with myself sometimes to stay at this desk.

I think the wind comes in the window smelling of greenness and fresh water, and flowers tangled in the grass; and all the writing of the Taoists are steeped in the love of nature and advise me to do as I choose—all this just to keep me from finishing. The Taoist poets say, do not be guided by artificial standards to waste a life in formal action, in reading and writing imitations of life—not when the real sun shines and the real wind blows outside. And somewhere, as close as thought... somewhere on Earth, perhaps rowing on my river, he is... And yet I postpone knowing him for the sake of my paper! The paper seems foolish in the light of this strong sunshine.

I am letting myself be diverted from work to write this; and I have been looking vaguely out the window, listening to a song-sparrow make rippling flows of notes like water falling. Professor Gordon would laugh like a loon and tell me it is spring, and how he always said there should be an official courting and mating season for students in the spring—it's against nature to make them work.

The sweet old idiot. I have to get back to work and not let my mind wander like this. . . .

He just thought of me again, and he was unhappy. There's no harm my leaving myself tuned to his thoughts about me, if I don't intrude. And this

time he was unhappy and lonely, so I let him feel I was there, acknowledging his thought with friendliness and reassurance, and all the comfort I could feel this warm May morning. He was immediately cheered up and felt relaxed and secure and not lonesome any more; we both went back to work. But now it was without breaking contact; not thinking of each other, but sharing the feeling of each other's presence, as if we were working in the same room. It makes work more pleasant, and it isn't as if we would bother each other.

Saturday

That was what I wrote yesterday, but it was not so. We bother each other very much. Today he is half-desperate, and I suddenly understood. He thinks that I am a daydream, someone created from his wishes, whom he can pretend to be with, but never meet. And all with such wistfulness.

I walked down to the river, stepping on the stones set in the steep parts of the bank, past the clumps of tall tiger lilies—walking rapidly, because oddly, I was half on the point of tears—and when I got to the edge knelt down and thrust my hand into the cold water. Whether by the sensation to convince him or myself that I was real, I don't know. The image of myself as a daydream was both so poetic and so plausible. Even the fact that he sees me as a student working with the same kind of urgency toward a similar deadline, on a landscape oddly the same and oddly different is what he would expect of dreams.

I won't say what I feel about him.

I know that he is real; I know I'll meet him someday. Perhaps I can guess where he is from the things that he sees, and go and find him.

He's pulling me apart, being so wistful and resigned to loss, where there is no loss; being so flattering about me; making me so happy; being so unhappy himself. I echoing his feelings, he echoing mine, makes the

strangest feeling of happy-sad for both of us.

I walked back up from the river remarkably upset and disturbed. I see now that he had assumed that I was a daydream from the first touch.

I can't concentrate on the Taoists.

Sunday

There are certain advantages in being mistaken for a daydream. I can visualize all kinds of embraces and hugs at him without feeling self-conscious at all. And he doesn't try to hide any of his feelings from me. We are getting to know each other, meshing more closely almost to the point where we can hear each others specific thoughts instead of just moods and images.

And he knows how I look. Not so much the color of my hair, and such outside details, but the way I move; the tones of my voice; the personality-signs by which a friend would recognize me in any disguise. I haven't tried to visualize him, but I know he's tall.

I'm still just a daydream to him. There is something about this that is tempting. We could build up a wonderful fantasy-life together, daydreaming together in spare moments, he imagining unsuspectingly and without concealment. And then someday I'd find him, and come up without warning and shake hands. He would be so embarrassed!

His concept of where he is is very confusing. I don't recognize his attitude toward his country as anything familiar—like a Britian's attitude for example. He seems to be discouraged, and a little indignant about his country, as if it were backward—or had some bad management in the government that the UN should straighten out. I can't place it. Attitudes can't be read for every kind of information, I guess. I'll wait until we grow closer, and I can get ideas specific enough to fit to names—or hope, in the meantime, that he will stare at an

envelope addressed to him for long enough for me to see a name and address through his eyes.

We were taking a walk, I in my landscape, he in his, and I grew lazy and sat down, feeling as if I were still walking with the swing of his muscles as he turned off the path and scrambled up an embankment. Feeling mischievous I visualized for him a picture of myself scrambling up beside him, and at the tip, when he stopped, I thought for him the sensation of hand grasped in hand.

He became very happy—to be fused with it was a rising tide of triumph—and he stopped and pointed upward for the imaginary girl beside him. I looked through his eyes at what he was seeing.

"Look at that, dream-girl," the sound of his voice came through dimly with the thought. It was the first time I heard his voice. "It happens sometimes in nature, too; it isn't always just a dream."

Two side-branches of a young giant oak overhead were twisted in a wonderful way, a complementing pattern, almost a rhythmic mirror of each other. His thought to himself was clearer than the words. *"If I search...there might be someone like this for me. Wanting it to be real might not cut me off from having it come someday. She could be like a person I will meet someday, somewhere."*

I was trying to answer—trying to visualize myself to him, real, human, with a life of small details and all the small troubles and imperfections of living that would not be in just an ideal image from his mind. Real.

He could feel the naturalness of it, and belief growing, but made himself stop thinking and returned to the thing he had thought before, without hope for anything better. *"I know someone like you must be alive somewhere,"* he said to his image of me, and refused to hope.

I could feel his wanting, held in by irony and past hurts. He didn't dare believe; it meant too much. He could

not risk being wrong.

But that night, when it was dark and he could feel that common sense saw him less clearly, when romance was more real, he walked that way again and looked up and said openly to the two entwining branches.

"And I will find you."

With our affinity and sharing of thoughts to guide him, he will find me. But he doesn't know he is looking for me. He thinks he is looking for a real person, who will be something like me.

It is funny and tragic that he thinks he imagines me.

I can't forget it, for every time I try to read an idiograph and open my mind to concept communication it reminds me of him, and we touch again.

Occasionally I stop trying to work, and laugh at nothing, and feel that I should cry.

Wednesday

The trouble is, I can't get any work done.

Thursday

I'm afraid.

Is any of this real? What is wrong with me that I have deceived myself so terrifyingly?

I went for a walk, I scrambled up a bank that was like the bank he had scrambled up, wherever he is, wherever— I looked up.

This is what I saw. A branch on a tall dead tree, a branch with a curving rhythmic pattern, a branch—not a branch *the* branch that is on a tree on a bank by his river, wherever he is. A branch that is on a live growing oak tree, I saw it as clearly today as I had seen it through his eyes on Sunday. It was leafless and dry, and the other one was missing—the other branch that had matched had broken off some time in the past and left a jagged stub. And the tree was dead.

The same thing can't be in both places.

There is an easy answer, an answer as simple as a knife in the throat. I must have seen this dead tree before, and remembered its curving branch; and when I needed it I gave the branch an imaginary mirror-image, and visualized the tree alive and green as a good background for—

Hallucination — wish-fulfillment — a false satisfaction for a need and loneliness I never recognized before, loneliness making up imaginary Christmas presents. I recognize need now, and perhaps even sanity is a small exchange for love.... But he must be real. I have always trusted my senses. What is there in contradiction except a dead branch and a feeling of fear, of something terribly wrong.

Later

I am quite calm, now—

I went out and looked at the water—or rather, we looked at the water, for he thought about me, and then joined to share what I was doing. We stood, invisibly hand in hand, communicating, fusing. I thought of something funny and we laughed. The contact was too close and human to be illusion. He isn't a dream; he's a person, a complex, ungraspable personality who is too much himself to be anything from my mind. He's solid flesh and human. We are part of each other now, we can't ever be fully separate again.

And we will find each other. We are determined and capable; whatever the difficulty is, we will find a way past it—they can't keep us apart. I still can't understand exactly where he is, but I will soon, for we are communicating so clearly now that I could hear the song he was singing as he walked back from his river.

A funny little tune I never heard before.

"Yes We Have No Bananas"—

I've been singing it all day—

I'm so happy.

Utopias in Contrast

Special Article

by Robert A. Madle

Two outstanding novels in the science-fiction orbit, though not written as science-fiction, appeared within the same decade. Both were on the same basic theme, though it would be difficult to find two novels more different . . .



THE UTOPIAN narratives have been an essential part of the literature of *Homo sapiens*, primarily because Man is basically a dreamer and the ideal of *Homo superior* is not antipathetic to him. And, although the word "Utopia" is Greek for "nowhere," there is considerable evidence that many great Utopian writers have influenced the governments and public policies of not only their contemporary societies, but of societies which were yet to come. These Utopias usually described an imaginary commonwealth in which politics, the social order, religion, statecraft, and science have attained near-perfection. And it is not unbelievable that these visionaries affected vastly society in general.

Thus, Sir Thomas More in his "Utopia", written in 1515, anticipates the future when he concerns himself with religious toleration, socialization, elimination of sexual taboos, and opposition to warfare.

However, Sir Thomas More was not the first Utopian writer—we have to travel far into the past to approximately 400 B. C., in order to locate the original Utopian scribe. He was,

of course, Plato and his narrative is description of a state ruled by reason, rather than by power, apparently inspired many later writers. Some of the immortal "The Republic". His the great masterpieces of Utopian writing which followed are Bacon's "New Atlantis"; Bulwer-Lytton's "The Coming Race"; Bellamy's "Looking Backwards"; W. D. Howells's "A Traveler from Altruria"; H. G. Wells' "A Modern Utopia"; "The World Set Free"; "Men Like Gods"; and the comparatively-recent work by Aldous Huxley, "Brave New World".

As important as many of the earlier Utopian works are from the scholarly aspect, it is certainly not within the scope of this article to do more than mention them. The remainder of this essay will be concerned with discussion and analyses of two of the most important (and contrasting) Utopian works of the Twentieth Century, "Men Like Gods" by H. G. Wells, and "Brave New World" by Aldous Huxley.

The significance of Mr. Wells' title is quite obvious—"Men Like Gods" is a dream of the future. Perhaps it was more than a dream, and embodied the Utopian beliefs of H. G. Wells in actuality. It is a picture of Man as he might (and perhaps

may) be several thousand years from now. H. G. Wells contrasts the man of the future with the man of today; however, there is a definite overtone of optimism in the novel—and the author seemed to express a firm belief that man will, despite his present stage of existence under a system of "...cruel and impudent exploitation of the multitudinous congestion of the common man by the predatory and acquisitive few," attain the exalted status of life under a scientific, Utopian world state. This should be qualified somewhat, as in "Men Like Gods" there is almost scientific anarchy; and the word "state" is obviously a decadent archaism to the completely-cooperative future men.

IT IS INTERESTING to observe that early Utopian writers saw in the advancement of science the defeat of mankind. The philosophy of Emerson and Thoreau embodies this type of thought, and they preached for a return to the soil—science must be stopped before it destroys the inherent beauty of man. (It would seem that one can visualize more than the "beauty" of man being destroyed today.) However, as science and industry progressed, Utopian writers began to look beyond the present—and they saw science being utilized as the servant of all mankind—not merely the selected few. Such is the basic theme of the present novel. Wells realized that the seeds of technological advancement were sown with the industrial revolution and that the incredible advancements of science were inevitable—and that there was no going back to Rousseau's "noble savage". In other words, science is here to stay—let mankind make the most of it!

As is quite typical of a Wells novel, the book is loaded down with characters; it is also typical that only a few exert any great influence on the novel itself. The principal character is Mr. Barnstaple, a middle-aged idealist who happens to be employed by a dreary conservative paper which is called,

ironically enough, *The Liberal*; Cecil Bursleigh, a prominent conservative leader; Rupert Catskill, the Secretary of State for War; Lady Stella, a typical upper-class matron; Freddy Mush, a cynical literateur; and Father Amerton, a somewhat-bigoted representative of the church. There is also another group of Earth-characters, the only one of importance being Lord Barralunga, a particularly grasping entrepreneur. Then there are Serpentine, Lion, Urthred, and several other "men like gods."

Mr. Barnstaple is advised by his physician to take a vacation. He takes off, without informing his wife and children, and heads nowhere in particular. Suddenly, what appears to be a slight dust-storm arises; when it has gone he finds himself in another world. Instead of a dirty, dusty road he now is standing on a highway which is apparently made of some sort of glass. It seems that a scientific experiment had gone amiss, and Barnstaple and the others have been whirled out of our dimension to the world of this co-existing dimension which lies sideways to our own. ("Men Like Gods" was written in 1922, and obviously served as the inspiration for several of our contemporary science fiction stories.) Wells explains this as follows:

...just as it would be possible for any number of practically two-dimensional universes to lie side by side, like sheets of paper, in a three-dimensional space, so in the many dimensional space about which the ill-equipped human mind is still slowly and painfully acquiring knowledge, it is possible for an innumerable quantity of practically three-dimensional universes to lie, as it were, side by side and to undergo a roughly parallel movement through time.

OF COURSE, this is an interpretation of Einstein's theory of the fourth dimension. This co-existing dimensional world is almost a duplicate of Earth except that it is just a bit "ahead" of us on the time track. However, the history of the planet is almost the same. Serpentine describes

the history of his world from the Last Age of Confusion. It is obvious that the "Last Age of Confusion" is our present era. And, as a matter of fact, Mr. Barnstaple quite possibly represents Herbert George himself. At any rate, greed, exploitation, starvation, et cetera, run rampant. Finally, when it appears that the planet is headed for another dark age, science develops sociology and psychology to such an extent that a new era is born. Population is controlled (Father Amerton is extremely shocked at this point) by the utilization of positive eugenics—and a new and glorious Man develops.

Wells batters our contemporary society, via the long recitation of Serpentine on the Last Age of Confusion. He does not stop at social criticism but treads on religious hypocrisy as well. (It should be pointed out here that the criticism of religion, as expounded by Wells, was not inspired by agnosticism. This is apparent from a perusal of his novel, "The Undying Fire", which is a tale of spiritual conflict. It seems that in this other world a man had been born who was worshipped as the son of God, or the son of Man. And he had been sacrificed on a wheel. As Wells so clearly states:

Instead of receiving him frankly and clearly and making him a part of their understandings and wills they pretended to eat him mystically and make him a part of their bodies. They turned his wheel into a miraculous symbol, and they confused it with the sun and the equator and the ecliptic.... And since this teacher's memory was very dear to the ignorant multitude...it was seized upon by the cunning and aggressive types who grew rich and powerful in its name, led people into great wars for its sake, and used it as a cover and justification for envy, hatred, tyranny and dark desires.

Barnstaple is the only Earthling who appreciates this Utopia—the others miss all the horrors and stupidities of their own world. Finally, all the Earthlings are isolated on a crag, because they had caused an epidemic of diseases to break out. While isolat-

ed, they hold a council of war and decide to conquer the godlike people. However, Barnstaple turns "traitor to mankind" and the plot is nipped in the bud. Barnstaple manages to escape from the crag just before the entire crag is sent into another dimension.

Mr. Barnstaple, now an admired individual in this beautiful world, continues to absorb its beauty and culture. Here we have Wells disseminating his social theories for many pages. Finally, Barnstaple—realizing that he doesn't fit in very well with this very advanced people— fervently requests that he be permitted to accomplish something which will supply him with a feeling of usefulness. He is informed that there is one thing he can do—allow himself to be used in an experiment involving dimensions in which he will be sent back to his own world. He reluctantly agrees to undergo the experiment (as he has no desire to leave this wonderful world) and it turns out to be successful.

After finishing the book, the reader is left with a strong impression of faith in the human race. It appears that Wells, despite his unceasing criticism of our era, firmly believed that man is headed for a glorious future—and that controlled science will be the golden chariot in which man will ride to that glowing destiny. "Men Like Gods" is full of hope, as well as criticism, and the following quote vividly displays the author's optimism:

Some day here and everywhere, Life of which you and I are but anticipatory atoms and eddies. Life will awaken indeed, one and whole and marvelous, like a child awaking to conscious life. It will open its drowsy eyes and stretch itself and smile, looking the mystery of God in the face as one meets the morning sun. We shall be there then, all that matters of us, you and I.... And it will be no more than a beginning, no more than a beginning....

IN CONTRAST to "Men Like Gods", Aldous Huxley's "Brave

New World" is pure satire. The title is ironic, and is obtained from the statement made by the Savage as he hears of the wonders of this wonderful world: "O brave new world that has such people in it!"

This novel falls into the class known as the "Utopian satire," and it is the purpose, usually, of this category of novels to depict man controlled by science, rather than controlling science. In this respect, it seems that there is a "Utopian spiral": the earlier writers saw man being crushed by the onrushing monster of scientific and mechanistic advancement; these ideas were superseded by the novel of optimism, which depicted a beautiful world of the future brought about by man's rule over science; and now we have returned on the spiral to the fear of man being doomed to scientific control.

There is ample propaganda here. Huxley (who wrote this novel in 1931—just nine years after Wells wrote "Men Like Gods") attempts to show how standardization and specialization—as it is practiced today in the factory—may eventually be utilized in everything man does. He employs the formula of good satire by taking everything which is normal in our civilization and reversing it. (Stanton A. Coblentz was also adept at this, as many science fiction connoisseurs will testify.)

Human ova are fertilized in test-tubes—it is obscene to even speak of natural birth; the inhabitants are completely lacking in inhibitions and sexual promiscuity is the normal procedure; the babies which are "decanted" are turned out in various styles: Alphas, Betas, Gammas, Deltas, and Epsilons. The latter are quite morose workers, while Alphas are supreme.

The embryos are conditioned from the moment of fertilization for their future existence. It is explained that a world completely full of Alphas would

be chaotic; none would be willing to perform menial tasks, and civilization would cease.

BEFORE GETTING further into the plot a few of the principal characters should be mentioned. Bernard Marx is a discontented Alpha-Plus, who works in the fertilization center; he is somewhat in love (which makes him an atavistic throwback) with Lenina Crowne, a charming young girl who is very "pneumatic" in bed. Then there is Mr. Savage, who was born of man and woman in a primitive reservation; Linda, Mr. Savage's mother, who made the mistake of not practicing her "Malthusian Contraceptive Drill" too thoroughly one evening. There are many minor characters, who are more interesting because of their unusual names rather than their respective parts in the novel: Polly Trotsky, Benito Hoover, Helmholtz Watson, Joanna Diesel, Morgana Rothschild, et cetera. It is possible, if Huxley were writing this novel today, he would add to this list Harry S. Eisenhower.

Approximately fifty percent of the novel is utilized in initiating the reader to the specialized civilization, which is laid in the year 632 A.F. (After Ford). In this world of assembly-line children, there is no marriage—and sex is considered just as essential as eating food—and is just as outwardly discussed and practiced. Pleasure is considered of prime importance, and the individuals seem to be constantly under the influence of "soma" in their off-duty hours. Soma is a drug which supplies one with an intense feeling of being inebriated, only there is no hangover. Inhibitions have completely vanished, but the individual is just as completely aware of his surroundings.

At any rate, Bernard Marx and Lenina receive special permission to visit a primitive reservation. Lenina is quite elated with the prospect of spending a weekend with Bernard, for

she is eager to display her pneumaticity. However, the trip turns out rather unusual because Bernard discovers Linda—formerly an Alpha Plus—and her son, John, and they are brought back to civilization. It might be mentioned that Linda had continuously aroused the ire of the primitive women by sleeping with their husbands—and she never could understand this.

Mr. Savage is a man possessing normal (to our way of thinking) morals. In fact, it would seem that he is somewhat too moral. His education had consisted of a volume of Shakespeare, but he had digested that quite thoroughly. With this background, Mr. Savage is definitely not prepared for the fate which awaits him in London. He is shocked to the tips of his toes when Lenina, whom he secretly loves, strips naked and attempts to seduce him; he had pictured her as a paragon of chastity! He is further dismayed when he observes a London Electrical Equipment Corporation which is staffed with Bokanovsky workers. The Bokanovsky process enables one human ovum to bud and produce hundreds of identical children. This is what he observes:

...eighty-three almost noseless black brachycephalic Deltas were cold-pressing. The fifty-six four-spindle chucking and turning machines were being manipulated by fifty-six aquilines and ginger Gammas. One hundred and seven heat-conditioned Epsilon Senegalese were working in the foundry. Thirty-three Delta females, long-headed, sandy, with narrow pelvises, and all within 20 millimetres of 1 metre 69 centimetres tall, were cutting screws....

MR. SAVAGE attempts to formulate a revolt in one of the factories; it is quelled, and he is taken before the Controller, who explains to

him the necessity of a controlled humanity. He is told that "...the optimum population is modeled on the iceberg—eight-ninths below the water-line, one-ninth above." In a society of this type, he is told, science is dangerous, and must be rigidly controlled—and truth is a definite menace. The Controller further states that "...Our Ford himself did a great deal to shift the emphasis from truth and beauty to comfort and happiness. Mass production demanded the shift."

Linda dies from constant over-usage of soma, and the Savage attempts to leave civilization by residing in an unused light-house. Unfortunately, he is discovered and hundreds of people swarm to the island to observe him—for he is a sideshow to them. The novel closes with the Savage committing suicide, because of his inability to orient himself to this world.

The novel offers an excellent contrast to "Men Like Gods". Both novels have something definite to say; Wells shows what can occur if man cooperates, and utilizes science for his benefit; Huxley attempts to portray man living in a completely totalitarian state. In Wells' novel, man is constantly searching and probing into the secrets of the universe; Huxley portrays a civilization in which there is no experimentation or endeavor—except when it is for the benefit of the state—and supervised by the state. It is interesting to note, however, that sexual taboos in both novels are nonexistent.

Well, we are offered two possibilities for the future. Which is more nearly accurate? That's an open question; but I prefer the world of Mr. Wells.

★

Inside Science Fiction

A New Department by Robert A. Madle

Now appears in **DYNAMIC SCIENCE FICTION**

FOUR HUNDRED BLACKBIRDS

Novelet of Tomorrow

by Jack Vance

(Illustrated by Milton Laros)

Abel Ruan knew he could gain nothing by refusal to cooperate with the general. It would change nothing, mean nothing except his own death. But if he lived, if he could command the scientific end of this war, there might be a chance to use the weapon he'd unwittingly discovered, in a different way.



right, Leon. Open up."

The guard hesitated, bristling at the short square man in the alien regalia.

"Open up," said the director, without heat, as if he had already passed

THE SIGHT of the green-and-black uniform, the guard stiffened, stepped forward, a hand at his weapon.

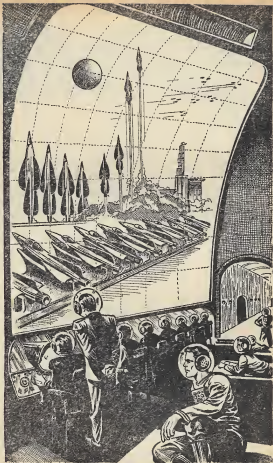
Director Edvard Schmidt of the Institute said, "It's all

through the same emotions.

The guard complied with a shrug, returning stare for flinty stare as the uniformed man passed in.

Beyond the wall, the director and his guest faced a number of white buildings irregularly placed on a grassy compound. Director Schmidt gestured with a lean old hand. "Undoubtedly the smallest, least pretentious national research station in the world."

The man in uniform turned him a quick look, pitiless rather than hes-



One by one the vast armada took off, until the skies were blackened by the mass of ships...

tile. "And probably the farthest advanced."

When Director Schmidt made a deprecatory murmur, the visitor said with a meaningful smile: "You Saaredes have enjoyed the benefits of a neutrality many years; you have not expended your brainpower on tactics and military subservience."

The sallow lines of Director Schmidt's face momentarily deepened. "True enough," he said bitterly, "we have been content inside our own borders; we don't want to rule the earth. Our ways of life may seem peculiar, but they suit us. And we do not drag on others into step."

The man in uniform smiled slightly. "An eloquent speech, Director. However, I am uninterested in your doctrine; I consider it a relic of the past. A change has come over the world—and in the future I advise a discipline upon your emotions as rigid as that which you impose on your intellect."

Director Schmidt said nothing. He looked over and beyond the walls of the Institute to the face of Mt. Hellenbraun, where great green firs rose staunchly, where snow lay golden-quiet in the slanting afternoon sun. Here was the spirit of Saare, a tradition which the general and his kind seemed unable to understand.

The general continued. "You must know from your work in the fields of science that all knowledge evolves, gathers strength. We of Moltroy are applying newly-discovered methods of control to our people, to our future, and ultimately the future of the world. Fanatics, extremists, individualists"—he rolled the words—"they are today like dinosaurs in the Stone Age, creatures marooned in unsympathetic times."

The director turned his head slowly, with an effort looked into the eyes of the soldier Zoltan Vec. Zoltan Vec stared back into the old man's eyes, indifferent, faintly amused. He jerked his shaven head. "Come, let us view your famous center of learning."

DIRECTOR SCHMIDT sighed. In regard to this, there was no argument; he had his orders.

"What will you examine first?"

Zoltan Vec consulted a notebook.

"Your physics department."

Director Schmidt shook his head.

"There is none."

The general said "What?" Then, coldly: "Impossible."

"We do not lop knowledge into discrete segments, like links of sausage," the director told him. "Few of our men are specialists."

Zoltan Vec rubbed his heavy chin.

"I do not understand your methods. Would you not achieve firmer results with better organization? Here—you have a problem: you classify it, you assign it to the man best acquainted with the field. In the army, I would never put a man trained in fusing-rockets to piloting a Juggertank. Why should a chemist be allowed to dabble in physics or biology?"

Director Schmidt had recovered his detachment. "The fields are closely related; there is no longer any such creature as a chemist."

Zoltan Vec shook his black-thatched head. "There are chemists in Moltroy. I spoke to one yesterday; he is working on a material that will coagulate mud to a solid. He told me himself he was a chemist."

The director smiled coolly. "Doubtless, then, you have chemists in Moltroy. But here we have none."

Zoltan Vec regarded the thin old man with sudden suspicion. "Your orders were explicit—to conduct me through the laboratory; to assist me without hindrance or reservation."

Director Schmidt now reflected that non-committal cooperation might have been wiser, since eventual humiliation, of one sort or another, was inevitable.... Perhaps he could preserve a little face.

"I have no reservations I speak to you with perfect freedom. The hindrances, if such they exist, are in your understanding of our methods—and are possibly due, I may add, to your training, your viewpoint."

"Enough!" barked Zoltan Vec in a loud harsh voice. "I demand to be taken to your physics department. First I will inspect your newest nucleonic techniques."

"This way," said Director Schmidt. Zoltan Vec marched after with the air of a man who has crushed an opposing force.

Schmidt rapped on a door, opened it. "Good afternoon, Louis." He gestured to the soldier. "Here," drily, "we have General Zoltan Vec of the Moltroy Army. General Vec, Louis Maisan."

Vec nodded, glanced around the room. "And where is your equipment?"

"Equipment?" Louis Maisan shook a bald head. "We have little here. It is well known that most of our work is theoretical."

Zoltan Vec pointed to a litter of papers. "What do you do there?"

Maisan regarded him with raised eyebrows. "May I inquire your interest?"

Director Schmidt raised a hand. "We have orders, Louis."

"Orders, orders," growled Maisan. "The word itself is an indignity..." He jerked an arm at the papers. "The papers are the property of the Institute, and subject to orders; I am not. Inspect the papers as thoroughly as you wish, but please do not trouble me with your questions."

ZOLTAN VEC wordlessly strode forward, took up a clip of papers, held them at arms-length. After a moment he turned with a puzzled frown to the director. "Just what is this glibberish?"

"Louis Maisan is calculating the angular velocities of mesons in several non-physical dimensions.... You might say he is determining how fast mesons turn themselves inside out."

Zoltan Vec returned the papers slowly to the table, made a note in a small book. Tucking the notebook in his pocket he swung a long slow glance around the room—blackboards,

desks, Louis Maisan's indifferent profile, Director Schmidt, impassive, watchful.

"You may conduct me, if you will. I wish to interview every man in your employ; I have a list here which I will check against."

They entered a long cool room smelling of formaldehyde. A low bench along one wall, under a line of green-glass windows, held thousands of cotton-stoppered flasks. Three men sat at microscopes, rapid, like ants at a drop of syrup, only occasionally one moving or speaking in a low tone. They paid General Vec and the director little heed.

Zoltan Vec's voice seemed needlessly brusque. "And here?"

"We are studying photosynthesis—using radio-active tracers, atom-substitution, other techniques. The flasks contain solutions in some of which we hope to duplicate photosynthesis."

"Which means you will be able to make food from air and water?"

"Oh, ultimately perhaps;... At the moment, we'd be satisfied with a trace of hydrocarbon."

Zoltan Vec turned away. "At our plant in the Merispihl mountains we grow two thousand tons of protein yeast a day. Think of it! Rations for the entire army! Will your process ever equal that record?"

"Never," declared the director.

"If I were you," said Zoltan Vec, "I would discontinue the study; it is clearly not so practical as the yeast process."

The director paused at a door, whose panel bore a playful caricature in blue crayon, the square root of negative one representing each eye. "In here are a group of mathematicians." He laid a hand on the knob, looked back at Vec quizzically. "Would their studies interest you?"

A sudden braying arose within, an excited bubbling. Director Schmidt frowned. Zoltan Vec stood watching with an intent gleam in his eye. "What are they so excited about?"

Director Schmidt shrugged, opened

the door. A tall young man with a pink face and wild black hair, stalking back and forth with a glass of wine in his hand, waved vehemently. "It is so beautiful, so simple, even as Fermat described.... Edward!— Edward!"—to Director Schmidt. "Today we are part of history! The discovery of the century!"

Zoltan Vec was abreast of Schmidt now. "What's this? What's this?"

"Fermat's lost solution! 'It is impossible to partition a cube into tow cubes,' said Fermat, 'I have discovered a truly wonderful proof of this,' said Fermat, but the margin was too narrow to hold it! Today I scribbled it in an instant! Now," and the tall young man drank his wine, "when they say Fermat, Euler, Gauss, Riemann, they will also say—" he beat his chest—"Jevinsky."

The director rubbed his chin. "You have checked for values of n above 14,000?"

Jevinsky waved his glass jubilantly. "No need! It is a general solution!"

"My congratulations!" came the sardonic compliments of General Zoltan Vec. He turned to the director. "Let us go on."

Director Schmidt hesitated. "This evening we will check together," he told Jevinsky. "In the meantime, don't call the press. In fact, better tell no one. We can't have the institute in an uproar for nothing."

Jevinsky nodded, settled like a great crane on a bench, began munching a slab of cheese.

his own thoughts. They crossed a court, entered an area around which a long low building curved like a U.

"Our newest addition," said Schmidt. "We still have some vacancies.... Archaeology. Here is a specialist, general—a man after your own heart; his job will occupy him the rest of his life."

Zoltan Vec gazed through the lido-opened door at the frail gray man, who at the moment was leaning back in his chair, smoking a pipe.

"He seems to be enjoying life," was the general's dour comment. Indeed, no one connected with the Institute appears to take it seriously. In Moltroy men earn their pay." He nodded within. "What's his job?"

Schmidt said coldly. "He is reconstructing the language of the Neolithic European."

Zoltan Vec snorted. "An idle man lost in dreams—at government expense. In Moltroy he would be assigned work in the shoe combine."

Director Schmidt glanced outside to a flag riding the west wind, a flag blue, green and white. "Here in Square, where we have no army, you, General, might likewise find yourself at a job ill-suited to your capabilities—a bouncer in a cheap cabaret, a horse trainer...."

General Zoltan Vec halted in mid-stride, searched Director Schmidt's lean old face with narrow eyes.

"Well, General?" inquired Schmidt. "What is it?"

Zoltan Vec said, "Let us continue."

They rounded a corner, crossed the compound to a large white building.

"This is our life-sciences building—biology, psychology, and the like."

They entered a large bright room, unoccupied. "In here," said Schmidt, "Professor Luka and his son, Dr. John Luka, of Midland University, are probing the consciousness of single-celled animals. The amoeba, they find, can see various colors, can hear, smell, detect warmth and cold.

2



SCHMIDT joined Zoltan Vec beyond the door. "A genius, that Jevinsky. Still young, unpolished, but one of our best men."

The soldier said nothing, but marched at Schmidt's side, thinking

They wish to ascertain his awareness of this world."

Zoltan Vec stared a moment across the top of his notebook. "Just what can these men hope to gain by their studies? A thousand and one things we need more than such... such..."

"Tomfoolery?" suggested Schmidt. "Is that the word? Suppose you learned that germs were able to choose between men as to which it desired to attack? Suppose a germ, face to face with a Moltroy soldier, turned away and instead infected a Federate?"

Zoltan Vec stood with eyebrows knitted, a dubious twist to his hard dark mouth. "Are these things possible? Is that what your laboratory is actually engaged in—germ warfare?"

"By no means," said Schmidt. "You express skepticism as to the value of the Lukas' research; I indicated a line along which these studies might conceivably lead."

THE GENERAL slowly turned away, wrote at some length in his notebook. Then: "Are you conducting any other investigations of this type?"

"Bacterial warfare? No," said Schmidt. "We have some rather interesting psycho-somatic studies in progress, one of which might be termed a vast projection of the Lukas' work."

General Zoltan Vec endeavored to grasp the idea. "How is that?"

"Step through here," and Schmidt pushed through a stainless steel swinging door. Zoltan Vec, close at his heels, saw a room of gray metal lined with benches and surgical equipment. A pair of white pallets occupied the center of the room, and a pair of young men, very quiet, lay on these.

Abel Ruan stood between the pallets, a thin wispy man somewhere between youth and middle-age. He was sand-colored; his head was long and bald; his long thin nose supported a pair of rimless glasses. He jerked a glance at his visitors, then

returned to the two lying asleep.

Schmidt and the general watched a moment. The general, seeing little of interest, showed signs of impatience. Schmidt appeared not to notice, but said behind his hand: "Abel Ruan is an extremely brilliant scientist, ingenious, resourceful. At the moment he is endeavoring to link the brains of two men through their spinal cords."

"Toward what end?" demanded Zoltan Vec flatly. "Another *tour de force*? Or is there some significance to his efforts?"

Abel Ruan's hearing was acute. "General," he said, without turning his head, "I am an extremely fortunate man."

Zoltan Vec inspected him a moment before replying. "How is that?"

"I am obsessed by many curiosities. They would nag me, make my life intolerable, if the Sunrede government were not paying me to satisfy them."

"How will all this—" Zoltan Vec gestured abruptly—"make you the wiser?"

"I have wondered many times if one man sees the world in the same shapes, the same colors as another man. Would the color Franz calls 'red' evoke an entirely different sensation in Jean's mind—if Jean could experience Franz's mental pictures? If so, when I couple Franz's eyes to Jean's brain, Jean will experience a wonderful sensation, for he will be seeing colors heretofore unimaginable, shapes previously beyond his conjecture. He will be living in a world utterly new and strange."

"Humph," said Zoltan Vec. "Very interesting. And how—" here he grinned humorlessly—"will the Sunrede government profit by Jean's amazement?"

Abel Ruan stretched his thin freckled arms, pushed the glasses up the bridge of his big nose. "We shall never know—since, unfortunately, contact between the two men is impossible to maintain."

Schmidt clucked. "Nothing, Abel?"

Abel shrugged. "A micro-volt or two. Nothing to speak of. Insufficient to arouse images. And—in all probability—as we imagined—the brain would automatically compensate."

Schmidt shook his head. "A pity."

"However," said Ruan, "a set of equally interesting results has appeared."

SCHMIDT glanced uncomfortably toward Zoltan Vec, who had inclined his massive head forward. "Indeed?"

"The difficulty arose in the coupling," said Ruan, smiling in a broad display of long white teeth. "Each brain wished to generate the master cycle; there was no consonance. In an effort to circumvent this conflict, I joined the brain of a canary to Jean's brain."

"And—"

Abel Ruan shrugged his thin shoulders. "Nothing occurred—until, and mark this, gentlemen, until one of the other birds chanced to become excited, whereupon Jean exhibited signs of restlessness."

Schmidt's old face looked suddenly eager, passionate, with all the fatigue erased. "Telepathy?"

Abel Ruan nodded. "Consistently."

Zoltan Vec rubbed his chin. Schmidt, becoming aware of him, diminished, lost the zest he had displayed, became gray and old once more.

Vec inquired sarcastically, "Does your government pay you to dabble in spiritualism, too?"

Schmidt hunched his head between his shoulders; Abel Ruan flung his arms out, turned away.

Schmidt said, "You speak in ignorance, General. Here at the Institute we feel that any means to establish understanding between the two camps of the world deserves all attention. If men understood each other freely, there would be no tension, no hostility, no war. . . . Telepathy would be the ideal means to this end."

Abel Ruan's glasses glinted as he tilted his narrow head back. He met Zoltan Vec's unsmiling gaze. "Doctor Schmidt, as you see, is an idealist. He believes in the essential decency of men."

Zoltan Vec nodded shortly. He noticed a chair, pulled it to him, seated himself, one booted leg advanced farther than the other. "Just how far have you progressed with these telepathy experiments?"

Abel Ruan leaned back against the wall, tapped his teeth with a pencil. "We've made a number of empirical discoveries, a few theoretical essays."

"Such as?"

"We find that birds are more sensitive, on the whole, than men. Possibly you have watched a flock of blackbirds, for instance, flying and suddenly all veering together as if guided by one brain."

Zoltan Vec nodded. "I was born on a farm in the Kerkhaz Valley."

"We've been using the idea of wave-length, loosely of course, since we are not aware of the fundamental nature of telepathy. Imagine telepathy as high frequency radiation, imagine the human brain as a transmitter and receiver only of low frequency, but a bird's brain as a transmitter and receiver of the correct wave-length. When we couple a bird's brain to the human, the bird's brain acts as an amplifier."

Director Schmidt coughed. "It's getting late, General. Perhaps you'd care to visit our observatory?"

ZOLTAN VEC made a brusque sign without turning his head. "Suppose there were two men, both with brains joined to the brains of birds?"

Abel Ruan smiled slightly. "We have made that experiment. The results are limited only to the conceptual faculties of the birds. Hunger, fear, curiosity, colors, numbers up to five—they may be sent into the bird's brain, transmitted, received and given to another human brain. Any ideas

more complex than these are impossible to telepathize."

"Can these bird brains be housed in portable units?" inquired Zoltan Vec. "Is it necessary that the men involved be incapacitated?"

Abel Ruan said without interest. "Only a small nerve-graft is necessary—leading from the requisite chord to a—let us say—'wall-plug' on the neck. Then the portable unit containing the bird's brain may be connected and disconnected at will.... However, General," he added, glasses glinting sardonically, "for any military communication, I'm sure your radio equipment will provide better service."

Zoltan Vec rose to his feet. "Methods of war," he observed drily, "change as well as the frontiers of science. Any future victory will be won in the first hour of war, by that power which can concentrate sufficient offensive potential above the opponents territory. If one combatant can devastate the other at will, while sealing off its own frontiers, the other power must instantly surrender."

"Your money or your life?" suggested Abel Ruan.

Zoltan Vec paced several steps back and forth unheeding. "All our plans are directed toward winning this quick war. Then we shall reorganize the world on the Moltroy pattern, with order, discipline, purpose, replacing aimlessness—" the sweep of his hand included the environs of the Institute "—dilettantism, irresponsibility."

Director Schmidt had sagged. His mouth moved feebly. "But war? Why need there be war? At the Grenaden Conference Moltroy and the World Federation agreed..." His voice trailed off.

Zoltan Vec stared briefly at him, then past. Abel Ruan showed his teeth in the smile that seemed more a nervous mannerism than a reflection of inner enjoyment, and which made him appear like a dentist, or an accountant eager to ingratiate himself.

Director Schmidt was gazing into

a far nothingness. "Even so," he muttered, "Suare will naturally retain its neutrality. That is traditional." He seemed to take comfort in the thought, and his voice became stronger. "Suare need not be involved, regardless of outcome."

Zoltan Vec finished writing in his notebook. "Continue with your work," he said to Abel Ruan. "You may find yourself richly rewarded." He turned to Director Schmidt. "Come, let us continue."

3



HEAD BENT, Edward Schmidt came walking, from his little cottage on the first slope of Mt. Hellenbraun, up the gravelled road to the gate.

The guard saluted.

"Good morning, Leon," said Schmidt in a flat automatic tone.

"Good morning, Director." Leon held up a newspaper. "Seen the news? Lesmond and Couch already have fled to Varly. The People's Rights party is in power, and they've jailed Renner."

Schmidt nodded dismally. "I just turned off the radio.... A terrible thing, Leon. I don't know—I hope it won't affect us here."

Leon pointed high at a flight of three airplanes. "Look, they don't waste any time, the insolent scoundrels! Those are Blatchats—Moltroy fighters!"

Schmidt turned away. "I suppose we'll see a lot more of them. It's the new way of invasion, Leon—no longer armies storming the borders, but cunning minds festering like tumors in the body of the government."

The telephone in the guard's cabin rang. Leon said, "Hello." Then: "It's for you, Director."

"Hello," said Schmidt. "Yes. . . . Ah,

what? ...Effective immediately, you say? ...I see..."

He returned outside. "Orders from the new Minister of the Interior. No one is to be permitted to leave the Institute, under any circumstances, until the new director arrives."

"New director?" gasped Leon. "But...?"

Schmidt flung out his long arms. "That's the way it goes, and there are your orders; no one is to leave."



Baze Roseau, the new director, was a small fat man, with a ready voice, small wide-set eyes which constantly seemed to be peering sidewise. Immediately on his arrival he summoned the personnel of the Institute to a conference, and without ceremony made a speech. He proved to be a quick incisive speaker.

"Friends, as you all know, the party of progress has assumed control in Suare, and our nation becomes a new dynamic entity. Now we must join the tide to the future, set our faces to the light, march against the forces of reaction and oppression. To this end the People's Rights central committee has formulated a new program for the Institute, one which will advance the cause. I'm sure you've all been dissatisfied with the previous aimless, irresolute policy; no longer will this be true. A goal will be set for us all to work toward, united and enthusiastic in our common devotion to the new life. I have here a number of changes which must be effected immediately; I will read them to you now, openly and for us all to know. That is the new policy at the Institute, no more interdepartmental jealousy and back-biting. We will all be working for our common goal, and if there are any shirkers or malcontents, I will be pleased to learn of them. ...Here then is our new program."

He unfolded a crackling sheet of paper. "First, Edward Schmidt will be

Assistant Director in Charge of Administration, while Abel Ruan is promoted to Assistant Director in Charge of Research. Everyone on the research staff will work under Ruan's orders, including a number of exchange students arriving today from Moltroy. Now that is all for the present. Let me say however, that while liberal bonuses will be awarded for good work and cooperation, there is no place in the new life for sluggards or reactionaries. We must all throw ourselves, heart and soul, into the struggle, all working for the inevitable victory over our enemies. That is all, thank you."

As the personnel filed silently, glumly, from the room, Baze Roseau signalled to Abel Ruan. When they were alone, the new director motioned Ruan to a seat, while he walked back and forth, rubbing his hands briskly.

"Ah, Ruan—it would hardly be fair to keep from you the fact that your work has made a great impression in higher quarters; you are well on the way to honor and wealth."

"Indeed?" Abel Ruan scratched the sparse hair at the back of his head.

Baze Roseau nodded. "It has been decided that your work on telepathy will be continued here at the Institute, to be concentrated on intensively. All else will be suspended."

"Hm." Abel Ruan removed his glasses, polished them musingly. "I see. ... It has been decided then, that there is a military application to my work?"

ROSEAU smiled craftily. "Between you and me, it might be said to be true. I understand General Zoltan Vec was impressed by the possibilities, and in this time of militancy anything which will contribute to our eventual victory over the imperialists must be utilized."

"Ah!" Abel Ruan nodded sagely. "And what, precisely, is desired?"

"Think of it this way," said Baze Roseau. "In the eventual war, the first hour is crucial. Our bombers and

missile-carriers, our fighter swarm will take off. They will attack at several points, and will be met by the defenses of the enemy, and his offensive force will take to the air. There will be a monstrous air battle over the ocean, and the side that breaks through will win the war. Now the weakest spot in our attack, in any attack, is coordination—since both sides automatically jam the other's radio channels. If we could maintain absolute control over all elements of our attacking force, the organization thus achieved would give us a decisive superiority, and we would have won the war. Telepathy functioning to perfection would completely solve the problem."

"Quite true, quite true," said Abel Ruan. "But—as I pointed out to General Vec—the medium through which we must act, the brain of a bird, permits no precision to the messages."

"The objection has been noted in higher places, and the suggestion made that intensive breeding and selection be tried to improve the type of brains involved.

Abel Ruan grinned, drawing aside his lips. "Something of the sort has occurred to me; however it is a long-range program."

"How long?" inquired Baze Roseau, eyes sharp and cold.

"Impossible to say. Several years, at least."

Baze Roseau nodded, began to pace once more. "That, of course, is unavoidable. Well, we will advance along those lines, as rapidly as possible. You will be in charge of the entire program. No effort, no expense is too great. There will of course be a substantial increase in your salary. If you succeed in developing a workable system, you will receive a pension of ten thousand marks a year, elite status and the Order of Butin."

"But," Ruan put forward, "suppose the idea is unsound? Suppose I fail?"

Baze Roseau swelled his plump

chest. "The Movement recognizes no such word. . . . Let us not talk of unpleasantness. . . ."

"Persuasive arguments," was Abel Ruan's comment. "On both hands. Well, we shall see; we shall see."

ON THE AFTERNOON of the same day, Edward Schmidt, knocking at the door and entering, found Abel Ruan seated in a chair leaning back on two legs with his own feet on a desk, arms clasped behind his head.

Schmidt quietly took a seat, leaned forward, sat bewildered when Ruan held up a hand for silence, picked up his portable phonograph, carried it to the wall, turned it on rather loudly.

Grinning his bare-toothed smile, Ruan returned to his seat. "That's where Roseau has installed his eavesdrop button. If he's listening he will be treated to the Moltroy anthem played *con brio*, with encores till you leave."

Schmidt shook his head. "I had no idea. . . ."

"It pays to be suspicious," said Ruan, "even when you are working your soul out for them."

Schmidt leaned forward. "That's what I came to see you about, Abel, you'll succeed in this project!" And he eyed Ruan accusingly.

"Of course. That is my business, to make progress. They are paying me well, they offer me honors."

"But heavens, man!" and Schmidt's old eyes glittered. "Do you mean to help those beasts? Do you understand what you are doing?"

Abel Ruan shrugged. "The sooner war comes, the sooner it will be over."

"But if you succeed—the slave state will be the model for the world."

Abel Ruan lit a cigarette. "Who knows? Moltroy may not win the war. After all, scientists work for the World Federation, too."

"But none of them are perfecting an instrument as decisive as the one

you prepare. ...I ask you, Abel, do you intend to complete the project?"

Abel Ruan's eyes glinted warily as he watched the older man. "That is my job."

Schmidt pulled out a gun, levelled it, fired. Ruan ducked, toppled from his chair, reached under the desk, pulled at the old man's legs. Schmidt fell, and the gun clattered to the floor out of his reach. Ruan picked it up, returned to his seat.

Schmidt rose stiffly. "Well, why don't you call the guards?"

Ruan shook his head. "Edward—you misjudge me. First and foremost, my guiding principle is—trust no-one! Except now, perhaps you—for you have expressed your sentiments forcefully. I would like to point out that no man is indispensable; that if you shot me, there are a thousand who could fill my shoes with equal effect. That is one reason I'm pursuing these experiments. Here I control the situation. I am on top of it, I guide it. If I refused to cooperate—one of the other thousand would be in my shoes, and we would not be a whit the better off."

Schmidt had been absorbing as much of this as possible. "Abel, you cleverly avoid stating anything specific. Do I understand that you—you have some sort of plan?"

"Opportunities suggest themselves to a thoughtful man," said Ruan. "But not—" he held up the gun—"of this nature."

Schmidt stood stiffly. "I did what my conscience told me. ...I'm not sure that I'm glad I failed, because you promise nothing definite—"

"The universe, down to the most negligible electron, is indefinite, my dear director," was Ruan's cheerful statement. "Absolute decision is out of my hands. And never forget my motto is—trust no-one."

"But in the meantime," remarked Schmidt glumly, "you perfect the weapon Moltroy will use to win the world."

4



GENERAL Zoltan Vec unsnapped the clip at his neck, removed the high-domed helmet.

"Well?" demanded Marshal Koltig, chief of staff of the Moltroy armed forces.

"Perfect," said Zoltan Vec. "When I shut my eyes, I see the same scene the pilot sees. With my eyes open, I can transmit orders which need no acknowledgment, because I feel the impact in the pilot's mind."

"Excellent." Marshal Koltig turned to Abel Ruan, who stood quietly in the background. "How many of these have you prepared?"

"About four hundred and fifty, sir," replied Abel Ruan after a moment's hesitation. He appeared thin, tired, his color had become pasty.

Marshal Koltig pondered. "Four hundred and fifty. ...Hm. We are ordering two hundred flight-groups into action. That means four hundred helmets—one for each flight captain and one for his intermedium here at headquarters. That leaves fifty spares. ...Is it not possible to obtain another fifty?"

Abel Ruan shook his head. "Not for several months, sir. These brains are exceedingly delicate things, and for every brain large and complex enough to serve, we must discard ten thousand faulty ones."

The Marshal reflected further. "Well, we will make do. If necessary we can double up in non-critical areas, or use radio." He turned back to Zoltan Vec. "General, you will conduct exhaustive tests and report to me." Zoltan Vec bowed his head.

Abel Ruan cleared his throat. "I have some ideas for an improved model of the helmet. If I work hard, I

possibly can complete a few in time for—an emergency. Perhaps enough for the top officers, or at least you and General Vec."

The marshal gestured cordially. "By all means. Spare no expense; you have done handsomely so far, Abel Ruan, and will be well rewarded."

The scientist bowed, withdrew.

THE MORNING of I Day. On a hundred fields bombers sat like great drone bees, gorged not with pollen but with nucleonic explosives, poison-fumes and mists, violent bacterial cultures, propaganda leaflets prepared by renegade Federates. Fighter-jets and rockets ranged in long glistening rows, fueled, dangerous, willing.

Within the barracks, pilots sat smoking, talking or silent, as their temperaments prompted, while in the command centers flight captains donned their new high-domed helmets. And at the staff headquarters deeper within Moltroy, two hundred intermediums donned helmets each containing a brain habituated to the brain in a corresponding flight captain's helmet.

The intermediums took their numbered seats, these ranged around a dais and a great screen. Here would form a schematized picture of the battle, with different colors indicating the advances, retreats, with lights emphasizing emergency points. The whole play of this chart would be synthesized from the steady reports of the two hundred flight captains, relaxed through the intermediums, and watching the chart, the staff, including General Vec and Marshal Koltig, would direct the strategy of the battle.

Marshal Koltig sat drinking coffee in a study nearby, brooding over intelligence reports—a large, brown, mustached man, full of bluff energy. "They know we've mobilized," he told General Vec. "We've kept it secret longer than I dared hope. . . . They're calling up reserves."

Vec poured himself coffee. "I'll be

interested to see the performance of the Mark IV Blatchats against their new Gladius Rams. I believe we've the better-fire-power."

Koltig looked up. "That's right, the Blatchats are your special pets."

"... Better emphasize once again to the intermediums that there must be no individual actions, no dog-fighting. We are a vast overwhelming mass of precise machinery; that's important. No heroics. Drive home the fact that we will win through our unprecedented firmness and coordination. We cannot allow this advantage to be nullified by individual grandstanding."

Vec stood up. "I'll make it clear." He paused. "Let me see—Abel Ruan was to have special helmets for us. Has he arrived?"

"I believe he's in Suite C. You'd better send an orderly to check. Time's getting short. Twenty-two minutes now."

ZOLTAN VEC delivered his warning speech to the sighing body of intermediums, returned to the study. The orderly he had sent to Abel Ruan saluted.

"Abel Ruan requests that you come to Suite C for your helmet, sir."

"Very well," said Vec. "Tell the technicians to give the screen a final check."

"Yes, sir."

Vec found Marshal Koltig in Suite C, adjusting a domed helmet to his head, while Abel Ruan connected a clip to the nerve graft on his neck.

"It would be better not to use the helmet until the battle is under way," said Ruan, in the tone of a doctor advising about the use of a salve. "The brain is particularly energetic, but it also must work harder than any of the others, so it is as well not to use it until there is a need."

"I see," said Marshal Koltig. "I just throw the switch, correct?"

"Right—the switch stimulates the brain, awakens it from what amounts to sleep. To select one whom you wish to communicate with, merely think of

the color corresponding to the name." He produced a printed sheet. "Here is the list, General Vec, as you see, is light blue. You, Marshal, are maroon. So to make contact with General Vec, merely picture the color. The brain will do the rest."

"Marvellous, marvellous," exclaimed Marshal Koltig. "In the name of our leader, the great Butin, you shall be richly rewarded!"

Abel Ruan shook his long narrow head, and the glasses on his nose glinted. "No, I want no reward—merely the satisfaction of contributing to a great historical event."

"Oh, you scientists!" the Marshal chafed. "Impractical visionaries!"

Abel Ruan smiled his wide long-toothed grin, turned to General Vec. "Here, General, is your helmet. You heard my instructions to the Marshal? Not to use the helmet until necessary?"

General Vec nodded, donned the helmet gingerly. Never had he quite accustomed himself to the use of this subsidiary brain. Grimly he clipped the lead to the nerve graft on his neck.

"Now," said Abel Ruan, "you're all in order."

Marshal Koltig glanced at his wrist-watch. "We must hurry. The bombers took off nine minutes ago; in half an hour we will be over Federate territory."

An orderly entered. "Contact has been made, sir. Over Blorland, by Fighter Squadron 819."

"Results?" snapped Marshal Koltig.

"Unreported, sir."

"819," muttered Koltig. "That will be Flight 14." He dialed "14" on a communicator, was put through to the intermedium serving the squadron in question.

"14."

"What's going on?"

"F-S 819 encountered 12 Gladius Rams at 90,000 feet, sir. They are trying to break our formation, but have not succeeded and we have

downed three—now four—without loss."

"Good," said Koltig. "Carry on."

A number of other contacts were made and reported, skirmishes, scout brushes.

"Looks like they're waiting for us somewhere over Ladomir," said Koltig, arising. "Well, Vec, perhaps we'd better take our places."

THEY PASSED through the door into the murmurous room, took their places on the dais. The screen above them now glowed, showing the Blorland-Ladomir boundaries, with a rim of the North Ocean in one corner. A flat black triangle slowly crossing the chart was the body of the Moltrov bombers, the great ships of strategic position. Once any number of these thunderous vessels had penetrated the enemies defenses, he must surrender, or see his nation vanish in molten clouds and hot gas. A fainter gray shadow indicated the supporting fighters, and already along the periphery spots of color indicated contact with the defending planes of the World Federated.

Far down, sweeping along the Glimmet coast came a blue shadow—vague because its composition was yet unknown—the World Federated offensive force. And at the bottom of the screen a chart noted the current casualties, so far nine Moltrov Blat-chats, opposed to fifteen Federate Gladius Rams.

Koltig glanced out at the two hundred intermediums; each sat pale, intent in his seat, eyes half-closed, the thoughts from the flight-captains far out over Ladomir winging home to the brains in the helmets and so to the human brain.

Vec said, "Here it comes—here comes their median sweep." A red line glared across the screen—the battle-front.

Koltig jumped to his desk, gestured to the screen operator. The map suddenly expanded, until the area of bat-

de filled the whole screen, and the black triangle of bombers dissolved into its separate elements.

Vec said, "They're breaking through at 98, sir."

Koltig shouted, "Rocket-squadrons 12, 13, 14 to 98!" His voice boomed across the hall, the intermedium working with the flights moved, sent the order, the flight captain swerved his squadron, and a minute later the breach was healed. The casualty chart at the bottom clicked over furiously, but faster, much faster on the Federate side.

"The Blatchats are out-maneuvering them," cried Vec, as the triangle of bombers, momentarily slowed, forged ahead. But as they watched, the apex of the triangle glowed red, vanished.

"By our great Butin!" cried Koltig, astounded. "What's happened?"

Vec called sharply to the integrators. "1—repeat."

"A new type of rocket, sir, evidently dive-bomb type. Estimated speed five thousand MPH."

"Get those heavy trackers above the fleet! Spot them as they come in!"

The order flashed across the windy distance, a segment in the rear rose, cast a panoply of accurate anti-fire above the bombers.

"Second rocket-attack repulsed, sir."

"Good, good!" Koltig clapped his hands. "Vec, so far, so good! We're gaining!" He suddenly became aware of the weight on his head, his helmet—forgotten in the tension of the battle. "Eh, Vec—we have our helmets. We can see this all ourselves."

"Of course," said Vec...



The room went mad with fear. The intermediums sprang from their seats, ran shrieking in circles, dove into corners, plunged from the room.

Koltig and Vec watched, rapt in the utmost dream-like wonder, unable even to feel dismay.

And on the battle-front the flight-

captains screamed and flailed their arms, and likewise fled anywhere legs could take them.

And in a twinkling the armada from Moltroy became a mindless anarchy of expensive machinery.

EDWARD SCHMIDT stopped the car, stared unbelievably at the man in the vineyard—a thin wispy man wearing faded blue dungarees, a man with a narrow bald head, a thin toothy mouth.

Schmidt jumped from the car. "Ah! Of all things, to find you here!"

Ruan looked up with no surprise, indeed little reaction other than a slight narrowing of the eyes. "How are you, Edward?"

"Well, of course! But you—" Schmidt indicated the vineyard.

"I own this land," said Abel shortly. "Now I live here—just over the hill."

"But your retirement—a young man yet!"

Ruan sighed, put his pruning shears in his pocket. "Evidently, my dear Edward, you do not read the papers."

"What's all this?" demanded Schmidt. "What's in the papers concerning you?"

Ruan pinched his lips, snorted sardonically. "Today, my friend, the great leader Butin, as well as Marshal Koltig and your old acquaintance General Vec, is to be hanged. . . . And but for my—let us say, anonymity—beside them would hang Abel Ruan. The mad scientist! The arch-fiend of the electrons! String him up!"

Schmidt sobered. In his surprise he had overlooked Ruan's record of co-operation with the Moltroy despots.

"Well—possibly. Of course, Butin and those others—after all they planned the whole thing. . . ."

Ruan stared bitterly sidelong at old Schmidt. "Hang them then? When simple therapy would make them into different men entirely? No—human blood-thirst demands revenge. Revenge on poor Abel Ruan—as well as Butin

the leader....Revenge is pride. It's like saying no-one's going to do that to me and get away with it!"

"Well—what about you?" inquired Schmidt cautiously. "Do you consider therapy a sufficient expiation for your part in the Moltroy crimes?"

Abel Ruan laughed a harsh loud laugh, with a genuine note of amusement.

"Edward, it becomes necessary to mar your illusions. You are not aware but that for my work, my scheming, my risks—that Butin would not be hanging today, but rather the members of the World Council!"

"It seems to me," said Schmidt coldly, "that you bent your best efforts to aid the Moltroy cause."

"How do you account for the remarkable Federate victory, when Moltroy was advancing at all levels?"

"Why—the breakdown of your telepathic system, of course."

"Bah!" Ruan suddenly bared his teeth, and the glasses perched on his long nose flashed in the sunlight. "The telepathic system functioned perfectly—from first to last, exactly as I had planned."

"Perhaps you had better explain."

RUAN SMILED. "Why not?...

From the time that the Moltroy general entered the Institute, it was obvious that telepathy would be used in war communications. All that was needed was the idea—the funds to develop it. Anyone of a thousand Moltroy scientists could have done as well as I. But, as I told you one time, it was necessary for me to stay with the project, stay on top of it, control it.... I went to work for the Moltroy army, even as you did."

Schmidt blinked. "I—I contributed nothing to their war effort."

"You detracted very little. Well, to get on; from the first, as you are aware, we used the brains of blackbirds, as being peculiarly susceptible to telepathic rapport. Even when the

brains had been bred and refined to nearly the complexity of a human brain, with a blackbird's instincts.... I built several special helmets secretly; I arranged for their use at exactly the critical instant. These helmets on the heads of Marshal Koltig and General Vex won the war for the World Federated."

"And these helmets—what was so remarkable about them?"

Abel Ruan smiled, showing long teeth. "They were built around the brains of sparrow-hawks."

Schmidt stared.

"The instant the blackbird-brains felt the hawk-brains, they reacted the same way four hundred blackbirds in the field react to a hawk in the sky. Panic."

Schmidt said after a moment, "Abel, this is hard to believe."

Ruan shrugged.

"However, I believe! I apologize to you. And I insist that you accompany me to Varly, and receive the recognition you deserve."

Ruan shook his head. "The Sunday-supplements would call me 'the Blackbird Hero'. And I have my vineyard to tend."

Schmidt said, "Once, Abel, you told Zolton Vex that you were a man of many curiosities. Are you still curious?"

"Indeed I am. I am curious as to the nature of an animal that produces great works of music, atomic power, a united world, but nonetheless hangs its old enemies."

"That curiosity may be relieved in the new Suarede National Institute. A chair; a salary; and time for your vineyard, too."

Abel Ruan flung out his long thin arms. "You are right. I'm with you."

Together they climbed into Schmidt's car and drove off toward Varly.

MARTIAN RITUAL

(continued from
page 54)

It, practically our every thought and action is governed by habit and precedent. We get up in the morning at about the same time each day; we perform certain motions of dressing and eating breakfast; we go to the place we work, where we go through a certain routine with little variation from day to day—and then return home to rest so that we may repeat the performance tomorrow. And for what? How many can say why we continue to do it? How many of us have some definite goal toward which we are working?

THE EXPLORER paused, then continued in a lower voice. "We are all very sure that we think in a reasonable logical manner. Yet how many people all their lives vote for the same party regardless of changes in events and circumstances? In reality they are not thinking at all, but only going through the same ritual that their parents and their grandparents did before them. And finally, who can tell me why we continue ceaselessly extracting gold from the Earth, and then immediately burying

it from sight under ground again? Whence comes this strange compulsion that will not give us any peace from this unremitting search for gold?

"And so it is with the Martians and their canals," Anthony concluded, letting his voice drop still lower, as if he were suddenly very tired. "I think that at some remote time in the past these colored stripes formed some sort of defensive-measure, a type of camouflage or protective coloration against enemies from some warlike neighboring planet. As long as their enemies saw these stripes, or thought that they saw them, they knew that the Martians were still able to resist. Their enemies gradually disappeared in the course of time—but the sense of fear lingered on. And, untold centuries later, they still feel the compulsion to keep these old lines freshly-marked, although their significance was forgotten long ago."

For a few moments after Anthony sat down there was not a sound. Then the audience began clapping enthusiastically—an ancient ritual expressing approval and appreciation.

★

Remembered Words

We're going to have to set a three-months deadline for those of you who've won originals to let us know which ones you'll like, because the old artwork piles up. Also, it's unfair to conventions — they want originals, too.

The winners this time are: (1) Alice Bullock (2) Neaman Peterson (3) David King.

This issue goes on sale in May, so we'll have to hear from you winners by the end of July. Miss Bullock gets her first choice of originals; Mr. Peterson should select two, and Mr. King three, in case their first choice was asked for by the higher renters.



Down To Earth

[Continued From Page 8]

spot faulty science, couldn't distinguish story-failings.

To allot blame where criticism is just—and all of the editors of the left, myself included, have offended here—the scientific element has often been slighted, if not mangled, for the sake of story. And it must be confessed that this has been the result of ignorance as often as of indifference. On the credit side, the left can offer more memorable stories (that "more" can refer both to quantity and quality) than the right; but it would seem to follow that the stories which brought the FBI down upon science-fiction editors during the war were of a nature that Mr. Gernsback should have been proud to present to the public had he been editing a science-fiction magazine at the time. Surely a story which is so "prophetic" that the author has unwittingly come close to describing a secret project currently in operation fits the right's standards.

The third force is, of course, the enemy within; both left and right stop howling "heretic" at each other long enough to join in opening fire upon the pseudo-science fraction. (At which point the right, no doubt, mutters bitterly on the number of instances in

which the left has let itself be duped; after all, it was the leading magazine of the left which espoused the dianetics fraud. Oddly enough, the fractional magazines were not as nearly as enthusiastic, but we can assume that they were likewise betrayed; they thought it was science, too!)

Speaking as a member of the left (but not *for* the left, since I have not been elected or appointed spokesman for anyone except myself) I believe that the science FICTION approach to science-fiction has proved more fruitful than the SCIENCE fiction gambit, and will continue to produce more praiseworthy examples of the art—stories which the right will not be ashamed to acknowledge. I may make more mistakes than my ascetic brethren, but I will not defer a millimeter to them in appreciation of science and the scientific method—even if, at times, I may be embarrassed by unwanted, though deserved, praise from the pseudo-science faction.

NOW FOR a few notes on our authors.

GORDON R. DICKSON is fairly well-known in the western story field; his first science-fiction appearance was in the Spring 1950 issue of *Fantastic Story Quarterly*, in collaboration with

Paul Anderson, in a story entitled "Trespass". Since then, he's appeared in *Asiouding Science-Fiction*, and many other markets.

JACK VANCE's book, "Vandals of the Void", is one of the spring releases in the Winston science-fiction series. His novelet, "Ecological Onslaught", in our last issue, has been a bell-ringer, so far as the early returns are concerned.

RICHARD WILSON is another author who came up from the "fan" group, around the same time as James Blish, Isaac Asimov, the early C. M. Kornbluth stories, and your editor's first attempts. His original appearance was with "Murder From Mars", in the April 1940 issue of *Astonishing Stories*.

CHARLES DYE, who interrupted work on his current novel to try another "cover story" for us, continues to be a controversial figure amongst reviewers and critics. Despite sour notes from a few, his stories have been well-liked by a majority of vocal readers.

ROBERT A. MADLE is one of the veterans fans who are working to make this year's science-fiction convention—Philadelphia in 1953—worthy of the tradition. He's a member of the PSFS, and an article by him on this organization appeared in a recent issue of *Space Science Fiction*.

PHILIP LATHAM is the pen-name of a well-known astronomer, who is author of a number of *Asiouding's* technical articles under his own name. The first "Latham" story was "N Day", which appeared in the January 1946 issue of the same magazine. His book, "Five Against Venus", was in Winston's 1952 spring release.

DAVID GRINNELL came to light in the Fall 1950 issue of *Magazine of Fantasy*, with "Top Secret". Since then, he's been seen there regularly, and we're happy to have him here.

KATHERINE MacLEAN first ap-

peared in the October 1949 issue of *Asiouding Science Fiction* with "Defense Mechanism". Her initial offering in our pages was the quasi-article, "Incommunicado", in the February 1952 issue of *Science Fiction Quarterly*.

Letters

WE READ all your letters, whether they're typed, hand-written, or chiseled into stone blocks—so long as we can decipher them at all. Every story-rating is counted, no matter how received—the preference coupon is for the convenience of those who want to vote, but haven't the time or inclination to write a letter.

There's but one plea from us: if you type your letter, please type it double-space, using only one side of the sheet. And if you must slight part of this request, have mercy on us to the extent of using but one side of the paper; we can send off a single-space letter to the printers (although such are a bit difficult to prepare for them), but matter typed on both sides of the sheet won't be accepted. Now we do not mind typing up a hand-written letter, at times; we realize that every reader does not own, or have access to, a typewriter. However, it's awfully aggravating to have to retype a missive which came from your machine, perfectly legible otherwise!

This time, the letter-section will be devoted to contest-entries, and your editor will remain uncommonly silent. Those of you who wish to participate in judging the winners should nominate the best three, in your order of preference; the winner will receive the original artwork for our March cover (illustrating Jones' "The Moon is Death"), while the second and third place selectees will have their choice of inferior originals from the same issue.

R. J. F. KNUTSON

Dear Mr. Lowndes:

I'd like to give my ideas on the story, "And The Truth Shall Make You Free", and get into your contest. As you say, the cover is a nice one. And I do have some views on the tale.

Regarding the attitude taken by Man, both mutant and basic stock, following their learning of the truth: I do wish you hadn't put in the restriction that the bipartite truth, as given, must be accepted. Without bothering to mess with religious arguments, we could have gotten started on an interesting argument in philosophy, as to whether anything, anywhere, could "just happen". But—so be it. There is enough to discuss as it is.

(1) If Man acted as Simak says they did, then the Spider and the Sphere and the others were right in their evaluation of Man. He deserved no more than a precarious corner position, with scant courtesy wasted on him. For surely, the Spider and the Sphere—when they returned—would not react as Man had.

It would be a pity, in a way, for Man had started off with the magnificent unconscious that seems to be behind really great life-forms. As James Branch Cabell once said, somewhere in his long "Biography of Don Quixote", a fish once conceived the mad idea that he ought to breathe air instead of water, and after a time made his madness fact. The tail-less ape, grown rusty at climbing, had once declared that he was God's viceroy on Earth, and seemed in a fair way of making it true, too. I imagine the other life-forms had somehow over-awed him, somehow sidetracked him: For, if Man had been what I think he is, he would have asked the machine at least one more question: "How can Man put meaning into the universe and life?"

(2) "Oh," says the Great God Author. "We can fix that up easily, and then you'll find no alternative so readily."

"I'll add that question, and have the machine answer, 'You cannot.'"

But I think I can knock down that idea, too. There was nothing and about questioning that point and if Man had anything inside him, he would spend seconds—if need be—to prove he could put meaning into things. After all, Man made the machine, and who is master here?

(3) Well, a case could be made out that the second item is just a way of getting around the need of agreeing with the machine. By that view, we would have to suppose the machine was right, and that no meaning could be put into things. Even then, I think that there are other possibilities than that given in Simak's story. I don't think the static, withdrawing, snail-back-into-the-shell reaction is necessary. Life goes on about us today, busy, dynamic, and not particularly unprogress-

ive. Yet, a considerable cross-section of the population in "Western" civilization—the most busy of the lot—believe implicitly in the story's Truth; and I see no signs that this is acting as a brake on civilization. There are mechanistic materialists among our scientists, artists, engineers, etc.; but they still work toward a bigger and better tomorrow. This, I think, is a clear, empirical proof that there would be no necessity for Man to react as he did in the story. He could have, in the face of such a truth, simply faced it, absorbed it into his body of knowledge, used it—say, to settle certain philosophical and other questions—and gone on to take his proper place in the scheme of things.

(4) Let's go back to the beginning. There is another basic way in which Man could have reacted to this bipartite truth. And that is a way that is not nice to think of. Each man could say, "Since life and the universe have no meaning, then no act of mine has any meaning. Anything I do has value only insofar as it gives me pleasure. Let me accordingly do anything I damn please, so long as I feel like doing it."

This would lead to a world of purely individualistic, opportunistic acts, a world of mistrust and, ultimate chaos. If family units still existed (they could—look at the culture of the Tobriand Islanders—based on mistrust and suspicion) then Graham would not have walked up to a waiting group. The old lady would probably have been left there as bait, and he would have been ambushed, to be killed for whatever spoils he might carry—or, at best, allowed to live, in a safely-maintained condition, to be a slave, and make the family's opportunistic way of life easier to follow.

This is not a good or sane alternative, but it would be, unfortunately, quite possible. Note that this way of life is more or less followed by certain of the criminal element of society through ages, and particularly in the shambles that occurred when certain rulers followed that way of life—the history of many of the little principalities in North Africa following the Mohammedan Empire's decline is almost too viciously bloodthirsty for me to recommend your checking into.

(5) There is still another possibility, again an unpleasant one to contemplate; one that would present, superficially, not too unfortunate picture, but one that would be based on a terrifyingly insidiousness. There is a fair amount of evidence showing that Man may be dependent upon something, real or imaginary, that he can learn on, something in which he can have faith. It might easily happen that Man might be so traumatized by the learning of this truth that he would not react angrily, but would fly into a complete rejection of the Truth. (Mind you, it could still be the truth, but Man would simply re-

fuse to accept it as true.) In a phrase, mass psychosis.

This could lead to several sorts of society or civilization, but whatever form it took, it would be one that was extremely inflexible and dogmatic (to allow no chance for the inferiorly-fearful truth to come forth again). It would almost certainly proclaim rigidly the supremacy and rightness of Man in all things (to keep out the Truth, lest it be presented by some other life-form). It would probably make up some dogma, and seek to proselytize, and spread its truth over all things (in a compulsive effort to wipe out the faintest chance that the real truth might ever come forth somewhere).

It would resemble the fanaticism of certain religions—or of Communism, in the political sphere. It might well continue to use science—in a controlled way, such as is done in the present Russian state—and the whole society would be pushed onward, in the desperate energy possible only to the insane. In that case, unless Man were really a second-rater compared to the other life-forms, he would out-do himself, and God help the Spiders and the Spheres! They would eventually be wiped out, root and branch, and Man would compulsively allow no other content life-form of any intelligence to exist. And even then, Man would go nowhere, in a frantic, inflexible, and wholly intolerant hurry! As I say, not a pretty picture.

These are all the possible alternatives that I can think of at the moment.

To divagate for a moment, the story brought to mind an interesting thought that you might also like to play with. Given a machine of the fantastic stiffness of the one in the story, suppose men had asked the important question, "Does the universe have a rational basis?", and received the answer, "No." I use the word rational in the sense "Amenable to reason."

The question is one which has annoyed a number of philosophers and theologians. Its implications run deep, for all science is based on the assumption that there is a rational basis to all things—in other words, that reason can, with the proper tools, find out anything it wishes to know; not today, or tomorrow, but ultimately. Think then, of the possible reactions of any life-form to this Truth, which would mean that its reason, intelligence and science could never hope to find out everything, but that there was a limit to the closeness to which scientific law—which, after all, arbitrarily divides the whole of existence into handy parts—could approach the wholeness of things, a limit which could be approached asymptotically, but which could not be passed. Makes for some interesting possibilities!

Lest you think that this is a completely wild day-dreaming, on the level of moon-

beams, look at what may be turning up in Communications Theory. There is reason to believe that such a question may not be answerable. In other words, science may have to confine its work as though the universe did have a rational basis, but always do as with the annoying knowledge that it could not prove its assumption. This is not said in so many words, but is hinted at in the new book, "Communication", a book on Communication Theory and psychology which I highly recommend. —150-25 115th Avenue, Jamaica, L.I., N.Y.

ROBIN LeROY

Dear Rob:

—Before "discussing" the Shink ending, and the alternative I would prefer, in March FSF—"And the Truth..." I should like to offer the alternative I choose to visualize.

Picking up the story in part I, chapter four...

"...custodian, five valleys distant; Jed held it in his hand now, and with the hesitant deliberation of a man unveiling the primal revelation assayed, "Here, David, is the tool you so long sought in the village. The key to the building you tried to enter. For three days you tried, and for three days failed. And shortly you shall learn why the thing therein is so well protected. But come, David, let me reveal to you those things you have failed to see in our primitive valley."

As he followed the oldster, climbing into a rustic survey, David sensed even more deeply the abiding strength and resolve that was a part of Jed's life, as indeed, it was with all these strong, contented people.

Their way turned through a grove of well-tended timber and followed along a little-used path of thickly-carpeted grass, bejeweled by little patches of wild-moss and spangled with bright splashes of golden-green sunlight that filtered through velvet leaves and indolently fanned the swaying limbs that wore them.

"...Before we arrive," Jed was saying, "Maybe I can answer more than one of your questions."

"I wish you would."

"First, David, about your welcome among us. You are Human. You are therefore a part of the Plan.

"You have been surprised, but not unpleasant by our simple, rural life. And so it is decided that we can show you our other life. An even simpler, elemental life."

So hilled had he been by the lazy, care-taking warmth of the day, and the easy, assured voice of his guide, David had not noticed their passage between two screen adornment. But within their boundaries,

pillars; gateposts without sentry-box or no beacon stirred the grass, nor did the drone of the Wicker-wasp, nor the scratch of the tree-locust, enter.

With a start of awe, the younger man sensed the unusual quiet; and, as abruptly, Jed turned their neochippes into an enclosure that miraculously appeared in the trees.

"In here," Jed nodded to the lawn-granite doorway before them, "is the home of all that we aspire to."

As the two entered, David's eye caught the inscription chiseled into the keystones of the portal. No symbols, no quotes, no authoritarian name accompanied the three severely-carved words. CHAOS, PLAN, DEITY.

Before the wonderment of his mind could bring a confused flood of questions to his lips, the newcomer was enmeshed in a rapidly-widening spiral of astonishment, confusion and awe, inspired by the sight unfolded before his bedazzled eyes and whirling senses.

There, within a seemingly infinite hall were all the world's dreams of technological research embodied in row upon row of gigantic calculators. Bank after bank of micro-filers. An endless wall of doorways through which could be seen what were obviously laboratories of every sort. Every machine activated, tall burettes and minute flasks filling, emptying, changing color and repeating the cycles, but not a human being in sight.

"But Jed, is this what you called a 'Simpler, elemental life?'"

"These are gadgets, David. These are the toys that our kind have made for scores of generations. These are the toys that have humbled our brothers in the other worlds. Humbled them, hindered them, and made them the pitiable lower-castes."

"But they are also tools with which to wreak miracles in the days of the Plan. And it is here that those of us qualified master these tools, and do the work of eternity."

"You see no one here to control the workings of these gadgets, do you, son? They are all elsewhere...in their cells and niches, in their gathering-halls. And their life is, David, simpler. Elemental."

"But then who does control all this equipment? And what is this plan you speak of? Why..."

"These things you were to see, before we let you read the Truth. Those who 'control' the work within this hall, do so Psychokinetically and 'pathically. You see, they are the fortunate ones of our little village whose native intellect, and chance genetic mutation, fit them to advance the Plan. They work in total harmony, without wasteful physical labor. They learn and develop without intrusion by the greater, mental world."

"It is they of whom your legends speak as the 'mutants' who settled our little world."

"But of the 'Plan'...and that inscription over the door of the hall..."

Again Jed's voice filled with assurance and pride, and a wonderful sort of humility as he said, "David, our work here is to provide the cosmos with a God. That, without embellishment, is the plan."

Shocked, unbeftering, David was about to question further, when interruption came in the form of a pleasant, soft-voiced salutation at his elbow.

Turning, he was confronted by a youth of not more than fifteen years—sleek, hairless and dwarfed. His legs, so sprightly they seemed scarcely able to support him, tapered gracefully to small feet that were perpetually poised on two broad, spatulate toes. Only his long-easing bore distinct resemblance to the normal human torso; and his bulging brain-case earned his delicate, pointed chin to almost escape mortal notice.

"...may call me Thad," the boy was saying. "I'm the official greeter of the hall. That is, until I've passed my apprenticeship." The fragile body swelled in perfect imitation of adolescent pride.

"Thad," Jed interposed, "will you go with us? You can show David by example, and tell him more simply than I, the work that is being done while we take him to read the Truth."

CHAPTER FIVE

Again Jed was holding the tarnished, age-old bronze key that was like a talisman in what, to David, had become a consuming, wildly intriguing mystery. That magnificent, simple, eternal reality...the Truth. As, with an almost ritualistic gesture, the old man inserted it in the lock that had so enigmatically reduced David those weeks past, his mind reviewed the startling things Thad and Jed had shown him, and explained to him.

Psycho-kinetics—or, as they termed it, psychokinesis—and levitation. Telekinetic and telepathic control of man's surroundings and environment, an actuality. Unused for immediate comfort or advancement, those powers were adapted to implement the deep scientific and philosophic problems into the nature of every form of energy and matter; yes, every 'use' in the cosmos.

Those in whom the recessive rational characteristics had become dominant, the best in every generation from all the little agrarian valleys, entered the "Hall of the Plan" and were carefully instructed in the unfoldment of the fabulous gifts within them. And just as carefully nurtured was their Faith in the Plan.

And the "Plan" itself, as Thad explained it was a fantastic dream of re-termining the randomness and the logic of the cosmos, to

impell it along a predetermined course.

Here, on this tiny, undesirable island of life, Man had driven himself for uncounted generations to study and master the laws of causality...and learn to predict the vagaries of randomness. To compute, in fact, each microscopic interaction of every iota and know without fail the resultant history not only thereof, but of the entire macrocosm.

Already charmed by the gargantuan calculations was the history of every race, human and inferior; non-human and superior.

The Dog, genus *Canis Superior*; the Spider-men; the Globes; even the primitive anti-birds, *Formicans Alas* would rise and die and the day would come when man, too, would not even exist as so much as a myth or legend. But here, in this small corner of eternity man was creating the heritage of the future races great and small.

For the calculations had shown that creation would cease, and the Cosmos would return to its primal stasis, unless the one critical mosaic of factors were changed. And that was the "Plan"...to apply pressure here; to restrain a mote there; to sustain a life and hasten a nova; to re-order the entirety that no mind could grasp.

And this, Thad had assured him, would create a pattern—not complete, not whole and finished, but stable. A pattern of creative growth and mutation that would of itself assume the proportions of entity and sentence. That would in each erg and iota be aware of self. As Jed had told him, David's numbed mind recalled, "...to provide the Cosmos with a God."

Awakened from his reverie by Jed's insistent nudge at his elbow, David entered the door of the building he had tried to break into upon his arrival on the planet.

Curiously not allowing him to wait until he could see in the gloom, he strained his eyes to see; and seeing, to feel his heart drop within him. For here, as in that other hall, was but another "gadget". A calculator, not so large as some of those others, but bearing the signs of incalculable age.

CHAPTER SIX

"You needn't look so crestfallen." Jed's hand steered David toward the machine. "As we've told you, you're here to read... the Truth.

"Here is the reason that we are serene, though but few of us work directly in the Plan. Here is our reason for the Plan, itself. Here is where our people first read the Truth; and once again each hundred years the three most honored of us enter to read and bear witness. Thus is our faith affirmed, and thus does the Truth remain with us, and not a myth or legend."

"Why then, Jed, do you allow me to see

these things?" asked David. "Why do you allow me in the Hall of the Plan, and why do you honor me with this pilgrimage to 'read the Truth'?"

"Because," came the reply, "you are part of the Plan.

"Many years ago your coming was foreseen, and your impact upon the macrocosm computed. Though we knew we must not prevent your seeking or finding us, we knew also that we must let you grow into acceptance of us for yourself.

"Did I not tell you that you would not carry the Truth back with you, to the other peoples?"

"You have such assurance," replied David. "But I still find myself stunned, and frightened by this...this paranoic dream of remaking the universe—this effort to create God.

"I'm a pitifully ignorant man, and perhaps that's why I'm frightened to think of such a thing. Nevertheless..."

"Look, Son. See what is written, and lose your fears. Thousands of years ago, our finest minds spent thousands of lifetimes researching, condensing, collating data to accurately pose two questions to a calculator designed so perfectly that, for its one function, it could not possibly fail. When those questions were answered, the machine was enshrined and the answers preserved for eternity that those who saw and read would know the truth."

As he pointed to the hermetically-encased panel of the machine, Jed continued, "The first question was this: 'What is the purpose of the Universe?' Now read the upper tape. See the answer."

David leaned closer and read: **THE UNIVERSE HAS NO PURPOSE. THE UNIVERSE JUST HAPPENED.**

Directly underneath lay the second tape, bearing its answer. And the question giving rise to it was self-evident, for it read: **LIFE HAS NO SIGNIFICANCE. LIFE IS AN ACCIDENT.**

"So you see," Jed's voice came to him thru a mist of sudden vertigo, "that is why we are so certain of the destiny we will create. Since we found the Truth, we have dedicated ourselves to create a purpose—or rather, the self-awareness and harmony which will in turn ceaseless and create a purpose in the Universe. We are dedicated to use our insignificant lives to create significance for life, itself. And of recent generations, our studies show us we cannot fail."

"Jed, what's to prevent others...interlopers, skeptics from interfering. Preventing the Plan?" The question came in tremulous voice as David felt himself enshrouded in cold, unrelenting fear for a suddenly glorious burthen of duty.

"You, Son. That, too we have calculated...for though our workers in the Hall of the Plan could easily shield our entire planet from inspection and even erase

memory from the minds of those who have found it—you will make that vigilance unnecessary. When you return to your fellows, the Plan will be secure.

"Go, now, David, for your friends have returned, and will be landing on the plain where they first left you."

EPilogue

As David traveled through the galaxy, many were the looks of commiseration given him by the superior races he served. Even the dogs he met, and who were still friendly to the Humans, cast glances of pity and occasionally tried to console him.

For—as ever was the case—had never traveled even faster than his beauty; and the old, proud legends of a lost growing Human outpost were shattered. The ghost of Human Dignity had been laid when this poor dreamer of a man had returned to his patrol ship to report that sought but relics and ruins survived of a race that had obviously decayed and died in a far corner of a remote star-shooter.

Always hidden were the lustrous gleams of joy in the Human's eyes as he was assigned to service one of the "gadgets" invented by his kind, and pressed into the commercial uses of the proud galactic masters.

THE END

Of course, Bob, I realize that the above, typed as it humbled itself out, and obviously without the polish of your authors, may not be what you would visualize as a good ending for the story in question. However, I feel I need not add either discussion or defense.

One statement about Simak's ending however. Since he paints humans of his story as generally the same type of slug as today, he errs in thinking that the eternal optimism, and basic reaction to challenge, would disappear from the animal's makeup upon a mere academic discovery of his "Truth". Man has always created gods, constantly re-forms and re-creates them; and in such a situation as Simak poses, would create one.

—15 E. Cary Street,
Richmond, Virginia

CARL ALEX SNEED

Dear Bob:

To read a story is one thing, while writing a story, that is readable, is a matter of an entirely different flavor. Mr. Simak did a wonderful job on "...And The Truth Shall Make You Free", which makes me feel like the fool that I am, when I disagree with his conclusion. I disagree for two reasons, and I believe that you saw the same flaws.

First: The "new" man, being

as a Mutant-Human. There may be Mutant-Folk or Mutant-People; or even Pseudo-Humans, but never Mutant-Humans, because a mutant is a deviation of a natural human. There would be no point in creating a mutant, unless we wanted a people, which would be devoid of certain human characteristics—which would be contrary to the purpose for which they were created. Therefore, if a mutant lacks certain human qualities, it becomes a pseudo-human, or false-human—but not a "Mutant-Human," as Mr. Simak referred to his characters, living on this particular planet. (In the rules of the contest, I noticed that you refer to them as "people," and I agree.)

Second: In the story, these mutants still retained the human characteristics of curiosity; therefore, they spent thousands of years seeking the Truth. Now, curiosity is born of doubt or the inability to accept things as they appear to be. So, I seriously doubt that they would have accepted the Truth, once they found it. In all probability, they would have launched another project to either prove or disprove the answer they received. And, too, what happened to the determination that allowed this obsession to exist? It would not die of its own accord in a matter of seconds, after persisting for thousands of years.

Based on the fact that these people had determination and curiosity, I believe their attitude would have been: "Hell, fellows, there's something wrong with this damn thing! Let's junk it and go beat the merry hell out of a bunch of dogs, spiders and stuff, and win back our place as headmen around here!"

—404 Boulevard N. E., Apt. 7,
Atlanta, Georgia

ROBERT COULSON

Dear Mr. Lowndes:

I should like to enter your contest on "And The Truth Shall Make You Free". Mankind has never allowed such minor details as facts to affect its beliefs. For that matter it doesn't always allow beliefs to affect its actions. (Take Christianity as an example.) For the "Truth" to affect a profound change in human living, it would have to be believed by a large—if not a major—segment of humanity. I do not think that any such revolutionary concept would be believed. A few scientists might commit suicide, and the machine might be destroyed by a mob, which would probably be urged on by a few religious fanatics. After which, mankind would go on as before.

Of course, the race in the story were mutants. Neither Mr. Simak nor I, however, can describe accurately the thought-

[Turn To Page 90]

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FUTURE Science Fiction

processes of mutants, so a writer can invent a race which will think in any manner which is convenient to the plot. I prefer to base my solution on the reactions of human sapience.

I thought the Simak story the best in the issue, followed by "Romance" and "Cold War". The other three seemed awfully familiar, somehow. All the illustrations were good, for a change.

—Silver Lake, Indiana

T. W. CAMFIELD

Dear Mr. Lowndes:

A remark or two concerning Mr. Simak's story ("And the Truth Shall Make You Free") in your March issue.

To me the attitude derived by the group of "humans" from their discovery of the "Truth" certainly justifies the position in which the human race finds itself—viz, "huddled....in the backwash of....an empire of Globes and Spiders....and other things".

We have assumed that the universe "just happened....has no purpose" and that life "is an accident" and "has no significance"—all of which means very little. The important thing is that there is a universe and life does exist. The fact that this group of people asked only these two questions of their machine, then threw up their hands in despair makes me wonder how they mustered sufficient ambition and intelligence to assemble it in the first place. No wonder humans were considered comparatively "Third-rate" by the other races!

To me their alternative attitude is plain. They would react with something like, "That's interesting but unimportant. Now that the machine's warmed up, let's get on with the serious questioning."

The origin of the universe and life—which this group could only consider in relation to previously acquired knowledge—should not have effected such a complete lack of ambition. Regardless of its origin, life does exist; but its existence would be of little importance (in my own estimation at least) without some striving for achievement or quest for knowledge.

Having the machine's answers to the first two questions, I would search relentlessly for some explanation probably beyond my own comprehension. I would begin, of course, by asking the machine a few more questions!—eg, "How did the universe 'just happen'?" "Life has no significance to whom? to what?" "The universe has no purpose in whose estimation?" What could be more simple (or more interesting!)? I must say that the group in the story were certainly easily discouraged.

I rather admired the attitude of the

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FUTURE Science Fiction

hammoide in the exploring party; but the fact that he was readily accepted by the mutant group found by the exploring party makes me suspect that he was a homo superior or mutant—possibly one of the splinter groups that left Earth before the dogs became dominant. On Earth the mutants were notoriously unsocial to homo sapiens and David's acceptance suggests that he was a mutant.

The two themes of their discovered "truths" were:

1. The universe has no purpose. The universe just happened.

2. Life has no significance. Life is an accident.

Many present-day scientists and philosophers believe just that, no more or less, but have not reached the dead end the mutants did; or to be more exact the particular group found by David. The viewpoints in I and II require a mental re-orientation from the most common viewpoints on Earth today—which are that the Universe is planned, and whatever happens to man and all other parts of the universe is an integral part of the Plan. The negation of the common viewpoint discovered by the logic machine of the mutants must imply that if one personifies the universe, then whatever happens to man, or any intelligent life-form, is simply immaterial to the universe; and the second implication that must follow is that all objectives of all intelligent life forms are equally valid!

It does not necessarily follow that life has no significance from the viewpoint of life itself. Thus, the sole reason for life is being. Life then becomes the wild factor in an unplanned universe, and able to set up its own goals and objectives. These objectives being equally valid for different life forms have one distinctive element—the objectives of each life form become significant to that life form as long as, and no longer, as the objectives satisfy! What—why, the life-forms in all cases! On the common viewpoint whatever happens to life is important to the plan, and the objectives of any life form either help to fulfill the plan, or hinder its fulfillment. Therefore from the commonly-accepted viewpoint it is very important to have the right objectives; and by "right" is thus defined, as whatever helps to fulfill the universal plan.

In the unplanned universe, with life-forms setting up their own objectives, a necessary conclusion is that the objectives are not fixed and are subject to change. Therefore a galactic civilization of many diverse life-forms can live in peace and harmony together because they can so adjust their goals of life to permit other intelligent beings to live. Thus greater freedom of will is possible under the "truths" discovered by the mutants. In the other case—the planned universe—clashes are a

[Turn To Page 96]

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FUTURE Science Fiction

necessarily because, due to the individual variation of different intelligent life-forms, it would be necessary for them to see different parts of the plan; and thus their duty to enforce their "divinely" inspired portion of reality on other life-form! If the universe is planned—due to the magnitude of the universe—it would be impossible for any life-form to ever perceive all of it; thus the piecemeal perception, which would force conflict.

Applying previous knowledge to the mutant group found by David, we should recall the unsocial traits and lack of ability to adjust to different life forms. A. g., failure to adjust to homo sapiens, would very easily lead to a defeatist attitude. The dead and reached by the mutants in the present story is very logical. The objectives of the mutant group were just as valid as any other life-form, but no more so! That is the keypoint to the philosophy. It would be easy to conceive of various other mutant groups, having discovered the selfsame "truth", who built galactic empires; others becoming hedonists; or any form of behavior conceivable, and each and every group still conforming to the implications of the two truths. Thus each mutant group would constitute one term of an infinite series if the summation of the series were considered as Mutant Culture(1) of a larger series covering all forms of life. In fact, it would be to the advantage of the intelligent races of a galaxy, under a galactic union, to have all terms of all possible infinite series applied to various cultures and races—to co-exist so that there would be a place for all types of individual behavior!

The present Simak story should be followed exploring what happened to other mutant forms, homo sapiens on Jupiter, on the Cobby Worlds, the wild robots who built spaceships as I recall and left earth, the dogs, etc.

I am suggesting that Simak continue the series, as almost every one has enjoyed them so much. He can continue forever as far as I am concerned.

—145 Jackson Avenue,
Rutherford, N. J.

Okay, readers—you pick the winners. Contestants can't vote, of course, but let's hear from the rest of you!

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THE RECKONING

A Report on Your
Votes and Comments

Harry Warner, Jr. has been called out to take a bow, on his first appearance, for his novelet beat out strong competition from such veterans as Simak, Jones and Anderson. I'm as surprised as he'll be!

Although the point-score is the same, such intangibles as a larger number of 1st and 2nd place nominations, plus volatile discussion outside the frame of the contest, gives Simak a clear title to second place, in my judgement. I'll list point-tied stories as ties only when they seem to be neck and neck all the way along the line.

No story escaped at least one slap from an irritated reader, and only one evaded top listing from everyone. However, the MacCreigh-Merrill combo didn't arouse much wrath, and a number of readers clearly stated that they liked the tale.

So, when all the votes were counted, the March issue came out thisaway:

1. Cold War (Warner, Jr.)	2.91
2. And The Truth Shall Make You Free (Simak)	3.00
3. The Moon Is Death (Jones)	3.00
4. Courier Of Chaos (Anderson)	3.33
5. Romance (Fyfe)	3.36
6. A Big Man With The Girls (MacCreigh-Merrill)	4.81

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★

Number these in order of your preference, to the left of numeral; if you thought any of them bad, mark an "X" beside your dislikes.



★

- 1. GRAVEYARD (Dickson)
- 2. THE AEROPAUSE (Dye)
- 3. STRIKE (Wilson)
- 4. ROAD TO ROME (Grinnell)
- 5. MARTIAN RITUAL (Latham)
- 6. WHERE OR WHEN? MacLean)
- 7. FOUR HUNDRED BLACKBIRDS (Vance)

Did you like the article? Yes No

Where were the three best letters this time? 1

2 3

General comments



You get 'Shop Training' at home when you learn Television my way!

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